

SUCCESS FOR ALL THROUGH SUPPORTING INCLUSIVE EDUCATION:  
A MIXED METHOD RESEARCH STUDY

A Dissertation

Presented in Partial Fulfillment of the Requirements for the

Degree of Doctor of Philosophy

With a

Major in Educational Leadership in the

Department of Graduate Education

Northwest Nazarene University

by

Pandi Ann Elison-Chang

April 2018

Major Professor: Cynthia Cook, Ph.D.

## AUTHORIZATION TO SUBMIT DISSERTATION

This dissertation of Pandi Elison-Chang, submitted for the degree of Doctor of Philosophy in Education with a major in Educational Leadership and titled "Success for All through Supporting Inclusive Education: A Mixed Method Research Study" has been reviewed in final form.

Permission, as indicated by the signatures and dates given below, is now granted to submit final copies.

Committee Chair

  
\_\_\_\_\_  
Dr. Cynthia Cook

Date April 3, 2018

Committee  
Members

  
\_\_\_\_\_  
Dr. Don Bingham

Date April 3, 2018

  
\_\_\_\_\_  
Dr. Barbara Taylor

Date 4/3/2018

Doctoral  
Program Director

  
\_\_\_\_\_  
Dr. Heidi Curtis

Date 4/3/2018

College of Adult  
and Graduate  
Studies, Dean

  
\_\_\_\_\_  
Dr. Michael Pitts

Date 4/3/2018

© Copyright by Pandi Elison-Chang 2018

All Rights Reserved

## ACKNOWLEDGMENTS

This work was only possible with the support of many individuals. First, thank you to all those who served as my sounding board, from family members to professional colleagues. You helped change and improve my research focus, and I hope it is worthwhile in its current form. Thank you to Dr. Cyndi Cook and my dissertation committee members, Dr. Don Bingham and Dr. Barbara Taylor, for the time you were willing to give me in helping complete this work. For those who edited without hesitation, it was most helpful and needed to complete each portion of the work. To the crew at Starbucks who learned my favorite drink when I needed the free wi-fi, thank you.

## DEDICATION

My educational work is dedicated to my family. To my parents who always expect me to think, strive to improve, and taught me to “get back on the horse when I got bucked off.” To my brothers, who inspire me and believe in me. To my sisters, who believe I am capable and provide my nieces and nephews when I need a distraction from life’s challenges. To my husband, who is always supportive, reminded me numerous times I really do like school, and bragged to my mother-in-law about this work more than I ever shall.

## ABSTRACT

Ascertaining an effective delivery method to enhance general education teacher empowerment and confidence in working with students with disabilities is the focus of this research. A survey instrument and focus group discussions were used with participants to determine how effective professional training was as an ongoing tool to enhance inclusive education services by general education teachers. Results indicate professional training has a positive impact on secondary general education teachers' willingness and ability to follow legal guidelines and implement accommodations in the inclusive classroom.

## TABLE OF CONTENTS

ACKNOWLEDGMENTS .....	ii
DEDICATION.....	iii
ABSTRACT .....	iv
Chapter I Introduction.....	1
Statement of Problem .....	3
Background.....	6
Research Questions.....	13
Description of Terms .....	15
Significance of the Study.....	17
Overview of Research Methods.....	20
Chapter II Review of Literature.....	26
Introduction.....	26
Theoretical Framework: Empowerment Theory .....	29
Special Education Challenges.....	33
Educational Programs to Support the Efforts of Special Education.....	41
Supporting Special Education within School Systems .....	48
Special Education Services in Secondary Education.....	51
Strengthening Special Education as Laws and Practices Change .....	56
Conclusion .....	63
Chapter III Design and Methodology .....	66
Introduction.....	66
Research Design .....	67
Participants.....	70
Data Collection .....	76
Analytical Methods.....	82
Limitations .....	86
Chapter IV Results.....	91
Introduction.....	91
Results.....	95
Conclusion.....	120
Chapter V Discussion .....	121
Introduction.....	121
Summary of the Results .....	121

Conclusion .....	132
Recommendations for Further Research.....	137
Implications for Professional Practice .....	140
References.....	145
Appendix A Letters to Superintendents.....	171
Appendix B Letters of Permission for Research .....	173
Appendix C Knowledge of IDEA Survey .....	175
Appendix D Survey Permission from Developer and Scoring Guide .....	181
Appendix E Survey Participant Permission.....	183
Appendix F HRRC Approval .....	185
Appendix G Outline of Professional Training.....	186
Appendix H Focus Group Protocols and Participant Permission .....	192
Appendix I Focus Group Guiding Questions .....	194
Appendix J Themes and Coding from Focus Group Discussions .....	195
Appendix K NIH Certification .....	196



## LIST OF TABLES

Table 1 <i>Required IEP Team Member Areas of Expertise</i> .....	61
Table 2 <i>Professional Training Participant Demographics</i> .....	75
Table 3 <i>Prior University Study or Professional Development/Training</i> .....	76
Table 4 <i>Research Participation by Site and Total</i> .....	95
Table 5 <i>Special Education Coursework and Professional Development/Training</i> .....	97
Table 6 <i>Means, Standard Deviation, and Percentages for Knowledge Statements</i> .....	99
Table 7 <i>Means and Standard Deviation for IDEA Principles and Composite</i> .....	100
Table 8 <i>Knowledge Composite Mean Scores by Certification</i> .....	102
Table 9 <i>Focus Group Participant Demographics</i> .....	103
Table 10 <i>Frequency Codes from Teacher Training Theme</i> .....	104
Table 11 <i>Teacher Feelings resulting from Lack of Knowledge</i> .....	104
Table 12 <i>Frequency Codes from Focus Group Themes</i> .....	105
Table 13 <i>Major Themes/Codes relating to Inclusive Classroom Settings</i> .....	106
Table 14 <i>Classroom Accommodation Codes</i> .....	109
Table 15 <i>Individual Education Plan (IEP) Theme and Codes</i> .....	112
Table 16 <i>Implementing Classroom Accommodation Code</i> .....	118

## LIST OF FIGURES

Figure 1 <i>State Requirements – Individuals with Disabilities Education Act of 2004</i> .....	11
Figure 2 <i>Major Components of Individual with Disabilities Education Act of 2004</i> .....	27
Figure 3 <i>Empowerment Theory in Education</i> .....	31
Figure 4 <i>History of Special Education Law</i> .....	39
Figure 5 <i>Participant District Demographics</i> .....	72
Figure 6 <i>Histogram of Knowledge Composite Scores</i> .....	101
Figure 7 <i>Teachers and Individual Education Plans (IEP)</i> .....	111
Figure 8 <i>IEP Knowledge Answer Frequency</i> .....	115
Figure 9 <i>Answer Frequency on IEP Specific Questions</i> .....	116
Figure 10 <i>Empowerment Theory Application to Research Study</i> .....	122

## **Chapter I**

### **Introduction**

Social activism and legal battles throughout the last several decades resulted in students with a range of learning disabilities attending public schools in the United States. In 1975, the Education for All Handicapped Children Act first mandated public education for students with disabilities (Spaulding & Pratt, 2015; “The history of special education in the United States,” 2015). Expanding continually since then, the federal provisions for students with disabilities is now known as the Individuals with Disabilities Education Act (IDEA) with resulting broadened interpretation through case law (IDEA, 2004; “The history of special education,” 2015; Samuels, 2015; Spaulding & Pratt, 2015; Wright, 2016). First entering public education in isolated programs, special education students increasingly receive services in the general education classroom setting ensuring their education is more inclusive (IDEA, 2004; “The history of special education,” 2015; Wright, 2016). Currently, inclusion of students with disabilities into general education classrooms is mandated by several federal laws and regulations, as well as case law (IDEA, 2004; Wright, 2016; Zirkel & Hetrick, 2017). The National Center for Education Statistics estimates approximately 13% of the students in the total contemporary public school enrollment are served under the IDEA provisions (National Center for Education Statistics, 2017). Schools reflect society as it moves towards more acceptance for individuals with a variety of disabilities (Russell & Bray, 2013; Samuels, 2015; Sanders, 2015).

Changes in education law and reform in special education regulations have led to more focus on inclusive education for students with disabilities by placing these students in what is termed the least restrictive environment (LRE) (Burden, Tinnerman, Lunce, & Runshe, 2010; Samuels, 2015; Wright, 2016). Least restrictive environment (LRE) refers to students with

disabilities being educated to the greatest extent appropriate alongside their peers in the general education setting (Dretchen-Serapiglia, 2016; Sanders, 2015; Wright, 2016; Zirkel & Hetrick, 2017). Students with an extensive array of disabilities now engage on all levels and in all areas of education alongside their typical peers (Akalin, Demir, Sucuoglu, Bakkaloglu, & Iscen, 2014; Casale-Giannola, 2012; Strieker, Gillis, & Zong, 2013). Special education professionals work diligently to ensure the needs of the students with disabilities are met and legal requirements are followed, but all educational personnel bear more responsibility currently for inclusive education (Cancio, Albrecht, & Johns, 2013; Coots, 2007; Karge & McCabe, 2014; Petersen, 2016; Wasburn-Moses, 2005).

The wide range of disabilities, levels of severity in the student population, and the ever-increasing legal stipulations, all contribute to the teaching of students with disabilities being an especially demanding aspect of the teaching profession (Brunsting, Sreckovic, & Lane, 2014; Hwang & Evans, 2011; Musyoka, Gentry, & Bartlett, 2015). Increasing demands placed on education personnel servicing a growing population of students with disabilities necessitates all educators, from administrators to general education teachers, gain knowledge to improve and assist in the educational experience for students (Frost & Kersten, 2011; Lumpkin, Claxton, & Wilson, 2014; Thurston, 2013). More knowledgeable educational personnel in a school will help the learning process become the best possible practice and experience for all involved with special education (Frost & Kersten, 2011; Hwang & Evans, 2011; Lumpkin et al., 2014; Thurston, 2013). Successful inclusion of all students with varied abilities and disabilities, is a key aspect of educational growth (IDEA, 2004).

## **Statement of the Problem**

Research indicates collaboration between administrators and all teachers working with students with disabilities enhances inclusive education systems (Darrow, 2017; Hamilton-Jones & Vail, 2014; Lowrey, Hollingshead, Howery, & Bishop, 2017; “Together we learn better,” 2015). Creating effective collaborative methods between general education and special education staff in a school is a focus for some working to improve inclusive education (Darrow, 2017; Lowrey et al., 2017; “Together we learn better,” 2015). Conducting research to determine effective methods of providing a more complete system of education while meeting legal requirements is essential for growth in inclusive education (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2005; Garrison-Wade, Sobel, & Fulmer, 2007; Prather-Jones, 2011; Russell & Bray, 2013; Wallace, Anderson, & Bartholomay, 2002). Administrators need to understand which resources, both in meeting legal mandates and in developing best teaching practices, are most effective for educators working with students with disabilities in the public education system (Ponomareva, 2015; Sanzo, Clayton, & Sherman, 2011; Shaffer & Thomas-Brown, 2015). Confusion and flaws in the interpretation and application of different laws related to education with students with disabilities exists amongst administrators and educational staff, indicating a need for further training to assist with clarity in implementation (Agarwal, Moya, Yasul, & Seymour, 2015; Hamilton-Jones & Vail, 2014; Holinka, 2018; Russell & Bray, 2013; U.S. Department of Education, 2017; Zirkel, 2014).

Previous research in teaching practices have discovered proven effective methods for assisting in special education programs (Cramer, Liston, Nevin & Thousand, 2010; Gable, Tonelson, Sheth, Wilson, & Park, 2012; Johnson, 2015; Lowrey et al., 2017). These strategies, such as evidence-based instruction and co-teaching, are fragmented in implementation

throughout school systems (Cramer et al., 2010; Gable et al., 2012; Johnson, 2015). Conducting more complete investigation to ascertain specific needed supports which if offered and provided to educational staff in schools with inclusive classroom settings will improve the education system for all teachers working with students is needed (Brusca-Vega, Alexander, & Kamin, 2014; Dieterich & Smith, 2015; Gable, et.al., 2012).

Though universities are beginning to offer coursework specific to special education in teacher training programs, the extent of this training still varies greatly dependent on the specific school or state certification requirements (Burden et al., 2010; Eskay, Onu, Ugwuanyi, Obiyo, & Udaya, 2012; Gokdere, 2012; Lee, Patterson, & Vega, 2011; Ross & Lignugaris-Kraft, 2015). Many universities are working to develop programs better preparing individuals entering the teaching profession in successful management of an inclusive classroom (Burden et al., 2010; Eskay et al., 2012; Gokdere, 2012; Lee et al., 2011). These programs take many different forms depending on the university, such as expanded legal requirement knowledge, specific field experiences in inclusive education, and focused teaching strategy practice (Burden et al., 2010; Eskay et al., 2012; Gokdere, 2012; Lee et al., 2011). Some universities have focused on expanding the training offered to support personnel, such as paraprofessionals, or to teachers in facilitating the use of support personnel (Rice & Carter, 2015; Sharpe & Hawes, 2003; Wilson, Dykstra, Watson, Boyd, & Crais, 2012). For example, universities in the United States, and other countries, have begun to offer training for a role in education referred to as inclusion assistants. These individuals will assist those students with the most severe disabilities participate more thoroughly in the general education classroom (Moshe, 2017). Varied teacher training programs are promoting the Universal Design for Learning (UDL), an educational strategy based on flexible learning accommodating individual differences as a

strategy for inclusive school settings (Katz & Sokal, 2016; Lowrey et al., 2017; Scott & Temple, 2017; Vitelli, 2015).

Educators, trained for both general and special education certifications, who must meet the daily requirements and demands of students with varied abilities and disabilities need continued opportunities to learn better strategies to assist in these endeavors (Akalin, et al., 2014; Brusca-Vega et al., 2014; Cramer et al., 2010; Gable et al., 2012; Rice & Carter, 2015; Sanagi, 2016). Educators working across grade levels and academic fields indicate a desire to gain needed skills and knowledge to build confidence and competence levels necessary to establish a successful inclusive classroom (Akalin et al., 2014; Brusca-Vega et al., 2014; Casale-Giannola, 2012; Combs, Elliott, & Whipple, 2010; Cramer et al., 2010, Dieterich & Smith, 2015; Gokdere, 2012; Grima-Farrell, Long, Bentley-Williams, & Laws, 2014; Kessell, Wingenbach, & Lawyer, 2009; Shaffer & Thomas-Brown, 2015; Strieker et al., 2013; Wallace et al., 2002). Professional training or development offered to teachers specific to special education strategies or regulations increases the awareness and confidence in implementing inclusive teaching strategies and meeting legal requirements for education personnel, irrespective of their position (Benedict, Brownell, Park, Bettini & Lauterbach, 2014; Casale-Giannola, 2012; Chant, Moes, & Ross, 2009; Kessell et al., 2009).

The purpose of this research study is to determine the level of knowledge educators have pertaining to inclusive education of students with disabilities. Primarily, this research determines the extent of the relationship with and impact of professional training on aspects of inclusive education has in secondary education. Specifically, the empowerment of secondary general education teachers in working within inclusive classroom settings and assisting with student accommodations is analyzed in the data obtained in this research study.

## Background

The landmark 1954 Supreme Court case *Brown v. Board of Education of Topeka* marks the beginnings of inclusive education in modern public school settings (“The history of special education,” 2015; Skiba et al., 2008; Spaulding & Pratt, 2015; “The fight for civil rights for people with disabilities,” 2017). The U.S. Supreme Court ruled in the *Brown* case student populations separated by race were not provided equitable education, moving the civil rights issue of inclusion inside classroom walls (*Brown v. Board of Education of Topeka*, 1954; Skiba et al., 2008; Spaulding & Pratt, 2015; “The fight for civil rights,” 2017). Using this precedent decision, reformers and advocates began looking at other civil rights issues within public education worthy of attention and improvement (Spaulding & Pratt, 2015; “The fight for civil rights,” 2017). Those seeking a place for students with disabilities in the public school setting would refer to the *Brown* case for foundational arguments on inclusion within education (Spaulding & Pratt, 2015; “The fight for civil rights,” 2017).

Eunice Kennedy Shriver, sister of former President of the United States John F. Kennedy, remains a famous advocate for inclusion of those with disabilities. Another Kennedy sibling, Rosemary, exhibited multiple disabilities, leading Shriver to actively advocate for more opportunities for those with disabilities (“The history of special education,” 2015; Spaulding & Pratt, 2015; “Who we are,” 2017). During Kennedy’s presidency, Shriver famously led the drive to obtain federal funding for teacher training in educating individuals with disabilities. She also founded the Special Olympics in Chicago in 1968 to increase inclusion of individuals with disabilities in sports (Spaulding & Pratt, 2015; “Who we are,” 2017). By bringing national attention to individuals with varied intellectual and physical disabilities, Shriver inspired other

families and advocates to maintain and expand the opportunities for individuals with disabilities (Skiba et al., 2008; Spaulding & Pratt, 2015; “Who we are,” 2017).

Educational opportunities became a main focus of families advocating for opportunities for individuals with disabilities (Spaulding & Pratt, 2015; “The fight for civil rights,” 2017). Following up on the progress made through the Kennedy administration’s focus on expanding opportunities for individuals with intellectual disabilities, advocates turned to the court system to expand rights of students with disabilities in school systems. Famously, the Pennsylvania Association for Retarded Children (PARC) brought a class-action suit against the state of Pennsylvania seeking more inclusion for children with disabilities in public schools (PARC v. Commonwealth of Pennsylvania, 1972; Spaulding & Pratt, 2015). The U.S. District Court ruled state laws in Pennsylvania excluding children with disabilities from public education were illegal (PARC v. Commonwealth of Pennsylvania, 1972). This case became one of the landmark cases pertaining to inclusion rights for students with disabilities (Spaulding & Pratt, 2015).

Also, in the early 1970s, advocates in the District of Columbia sought to have students with varied types of disabilities incorporated more systematically within the public education system (Hurd & Piegrass, 2009; Mills v. Board of Education, 1972). In Mills v. Board of Education (1972), advocates brought a class action lawsuit against the District of Columbia. Conceding the District of Columbia’s legal obligation in educating students with disabilities, the Board of Education argued it did not have the funding necessary to include and support the students (Hurd & Piegrass, 2009; Mills v. Board of Education, 1972). The Court ruled funding needed to be equitable in supporting students with disabilities in their access to public education, and insufficient funds was not acceptable as a rationale for failing to meet obligations



to the students with disabilities (*Mills v. Board of Education*, 1972). These key cases triggered increased focus on using legal recourse to expand opportunities for students with disabilities in the realm of education (Hurd & Piepgrass, 2009; Spaulding & Pratt, 2015).

After achieving success through the court system, advocates for inclusion of students with disabilities in educational systems turned to promotion of and lobbying for legislative acts to continue growth in the public school settings (Skiba et al., 2008; Spaulding & Pratt, 2015). Public Law 94-142, The Education for All Handicapped Children Act of 1975 (EHA), became the primary federal law regulating and providing federal funding for the education of all students with disabilities. The EHA expanded access to public education for students with disabilities (Skiba et al., 2008; Spaulding & Pratt, 2015; U.S. Department of Education, 2000). Creating the basic system for publicly educating students with disabilities from ages 3 to 21 years old, this law contained many foundational concepts which would frame inclusive education (IDEA, 2004; Skiba et al., 2008; Spaulding & Pratt, 2015). With passage of this law, public school officials were instructed to facilitate inclusion and availability of education services for students with disabilities within all schools (Skiba et al., 2008; Spaulding & Pratt, 2015; Zirkel, 2014). Since structure and format of this new inclusive education system depended on state interpretation and varied greatly across the nation, families and advocates continued striving for improvements in the services being provided (Skiba et al., 2008; Spaulding & Pratt, 2015).

Fundamental concepts within special education, including the Individual Education Plan, due process rights, least restrictive environment, and free appropriate education, were introduced in the initial EHA of 1975 (Skiba et al., 2008; Spaulding & Pratt, 2015; “The fight for civil rights,” 2017; U.S. Department of Education, 2000). Advocates, educators, and

families built research and best practices upon these founding concepts (Skiba et al., 2008; Spaulding & Pratt, 2015). Focus on special education ideals and changing educational philosophy led to amending of the law in 1986, extending the guarantees of services and programs to children ages 0 to 3 (Skiba et al., 2008; Spaulding & Pratt, 2015). In the 1990s, more extensive revisions and expansion of law led to enactment of the renamed Individuals with Disabilities Education Act (IDEA) and attached amendments (IDEA, 1997; IDEA, 2004; U.S. Department of Education, 2000). State education departments, teacher preparatory programs, and public schools responsible for promoting education of students with disabilities stayed abreast of the evolving federal regulations (Spaulding & Pratt, 2015; U.S. Department of Education, 2005). Interpretation of the meaning of the varied concepts in the law and relevant case rulings, as well as the structure of programs, continued to depend upon the attentiveness of the personnel in different education programs and public school systems (U.S. Department of Education, 2005; Valeo, 2008; Zirkel, 2014).

Evolving societal philosophy about the abilities of individuals with disabilities continued to drive legal challenges to the special education laws and research focused on improving teaching practices (Brunsting et al., 2014; Zirkel, 2014). The Supreme Court issued a major opinion on the evolving standards and mandates within special education in the case *Board of Education of Hendricks Hudson Central School District v. Rowley* (1982). Setting a precedent emphasizing sufficiency and individuality, specifically within the free appropriate public education (FAPE) standard, *Rowley* (1982) is a landmark decision illustrating the openness of interpretation within the established guidelines (Hurd & Piepgrass, 2009; Zirkel, 2014). Answering the defendant's challenge the law should offer maximum benefits to a student with disabilities, the Court ruled states must establish programs offering basic educational

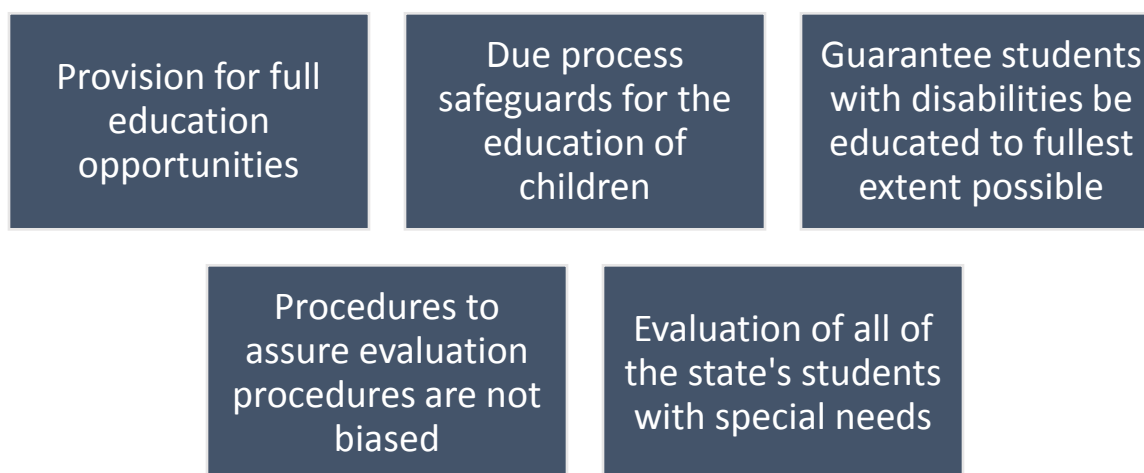
opportunity to students in special education in which they could make adequate progress in learning (Johnson, 2003; Board of Education v. Rowley, 1982). Lower court rulings and education departments in varied states then used this precedent in creating different standards pertaining to the structure of special education programs (Holinka, 2018; Johnson, 2003; “Thw Rowley decision,” 2017; Zirkel, 2014).

Through the 1980s and 1990s, the court system would issue many key rulings greatly impacting the public school systems (Hurd & Piepgrass, 2009; Skiba et al., 2008; Spaulding & Pratt, 2015; “The Rowley decision,” 2017; Zirkel, 2014). Examples include Honig v. Doe (1988), mandating school discipline should maintain students with disabilities in the classroom, and Cedar Rapids Community School Dist. Four v. Garret F. (1999), requiring schools fund related services having an impact on a student's education (Hurd & Piepgrass, 2009; Skiba et al., 2008; Spaulding & Pratt, 2015). Increasing case rulings and improving research on disabilities and education led to major revision of the federal education law pertaining to students with disabilities in 1997 (IDEA, 2007; Zirkel, 2014). Movement in public education towards high uniform standards also impacted the structure of special education programs within the states as students with disabilities became accountable for meeting the high expectation obligation within these regulations (IDEA, 2007; Johnson, 2003; Zirkel, 2014).

Extensive changes and reauthorization of federal laws resulted in the current version of the regulations pertaining to students with disabilities titled Individuals with Disabilities Education Improvement Act (IDEA) of 2004 (IDEA, 2004; Skiba et al., 2008; Spaulding & Pratt, 2015; Zirkel, 2014). The Individuals with Disabilities Education Improvement Act (IDEA) of 2004 provides current guidelines to states and local education agencies in meeting the needs of students with disabilities (IDEA, 2004; Spaulding & Pratt, 2015). Key components

of the law, Figure 1, include due process safeguards for parents and guardians to utilize and guidelines on evaluation processes for states to use in order to ensure that students with disabilities are best served (IDEA, 2004; Spaulding & Pratt, 2015; Zirkel, 2014). Emphasis on students with disabilities receiving education services in the least restrictive environment meeting both their learning needs and ensuring involvement with their peers is a key aspect of the reauthorization in IDEA of 2004 (IDEA, 2004; Zirkel, 2014). Though the IDEA of 2004 establishes the major parameters for teaching students with disabilities inclusively, challenges in court as to aspects of federal law and resulting state interpretation is continuing creation of case law guiding educators (IDEA, 2004; Spaulding & Pratt, 2015).

**Figure 1 - State Requirements - Individuals with Disabilities Education Act of 2004**



Cases such as *Schaffer v. Weast* (2005), with the Supreme Court defining burden of proof in due process hearings under IDEA, are providing guidance in how schools must implement the components of the special education laws (Conroy, Yell, & Katsiyannis, 2008). The Supreme Court is continuing to review special education law, recently hearing and issuing opinions in two

cases pertaining to the rights of students with disabilities within the education system. The cases are *Fry v. Napoleon Community School District* (2017), pertaining to the due process rights under IDEA 2004, and *Andrew F. v. Douglas County School Board* (2017), concerning educational growth guaranteed to students with disabilities (Holinka, 2018; Howe, 2017; Samuels, 2017; Weatherly, 2018). Proving educators need to continuously review and understand applicable federal, state, and case law within special education, the Court issued rulings in the 2016-2017 term requiring states and their school systems adjust standards they have been operating under in previous years (*Andrew F. v. Douglas*, 2017; *Fry v. Napoleon*, 2017; Holinka, 2018; Howe, 2017; Samuels, 2017; U.S. Department of Education, 2017; Weatherly, 2018).

Educational leaders responsible for ensuring inclusive philosophical ideals and federal requirements for special education are continuing work to improve modern school settings (Abbas Zafar, & Naz, 2016; Dieterich & Smith, 2015; Wasburn-Moses, 2005). University programs training educators are continuing in developing strategies for better preparing new general education teachers in meeting the needs of special education students, such as increasing emphasis on the Universal Design for Learning (Cancio et al., 2013; Karge & McCabe, 2014; Katz & Sokal, 2016; Lowrey et al., 2017; Ross & Lignugaris-Kraft, 2015; Scott & Temple, 2017; Sutton, Bausmith, O'Connor, Pae, & Payne, 2014; Vitelli, 2015). Use of Universal Design for Learning (UDL) is moving inclusive education forward with many options for learning to meet diverse needs of students (Boroson, 2017; Lowrey et al., 2017). Student teaching and mentoring programs are focusing more on providing new teachers the opportunity to learn to successfully work with students with varied disabilities by ensuring practice during their preservice training (Melekoglu, 2013; Ross & Lignugaris-Kraft, 2015; Strieker et al.,

2013). Research supports the need for continued training in this type of program to increase confidence in teachers asked to work with many types of learners (Boroson, 2017; Lowrey et al., 2017; Strieker et al., 2013).

School districts are seeking professional development opportunities founded on enabling more expansive learning opportunities for all students within inclusive environments (Benedict et al., 2014; Bradshaw, 2015; Brusca-Vega et al., 2014; Kosko & Wilkins, 2009; Nishimura, 2014). Utilizing strategies such as team teaching and peer tutoring, educators are continuously seeking improvement for the education offered to students struggling with learning challenges (Brusca-Vega et al., 2014; Carter et al., 2015; Cramer et al., 2010; Gurgur & Uzuner, 2010; Mastropieri et al., 2006). The constantly evolving laws require schools seek methods which consistently train and inform all educators within inclusive educational settings (Alfaro, Kupczynski, & Mundy, 2015; Hurd & Piepgrass, 2009; Kleinert et al., 2015; Sanagi, 2016; Sanders, 2015; Zirkel, 2014).

### **Research Questions**

In the field of education, as teachers gain skills and knowledge they are able to approach the assorted requirements and ever-changing challenges of educating students with confidence, competency, and consistency (Holcomb-McCoy & Bryan, 2010; Hur, 2006; Kamil, Shantini & Sardin, 2015; Lumpkin et al., 2014; Ruechakul, Erawan, & Siwarom, 2015; Wall & Palmer, 2015). By empowering education personnel with expanding knowledge of the legal requirements within special education and instructional skills assisting students with disabilities in the classroom, education services will improve for all (Combs, et al., 2010; Dieterich & Smith, 2015; Gable et al., 2012; Kamil et al., 2015; Strieker et al., 2013; Wall & Palmer, 2015). Additionally, research completed by Russell & Bray (2013) and Agarwal et al. (2015)

emphasize the need for increased knowledge of special education legal requirements on the part of education personnel.

The focus of this study is to determine professional training methods to successfully empower currently practicing middle and high school general education teaching staff to better meet legal requirements in special education. An element of the study is empowering secondary education teachers with confidence and competence in providing services and supports to students with disabilities in the general education classrooms while meeting the requirements of the legal mandates within this area of education. In this study, information focusing on the IEP, a key component of IDEA, and implementing accommodations within the classroom was provided to secondary school general education teachers in the school setting through professional training. Focusing on legal mandates surrounding special education, this training provided the opportunity to identify and then practice accommodations and adaptations required by IDEA of 2004 (Hurd & Piepgrass, 2009; IDEA, 2004). To ascertain the impact of training and knowledge attainment for secondary school teachers, including general and special education certified, the following research questions were addressed:

1. How accurate is the understanding and knowledge secondary teachers have of the legal requirements in educating students with disabilities in the general education setting?
2. What is the extent of the relationship between professional training on special education legal requirements and the confidence secondary teachers have in serving students with disabilities in the general education setting?
3. What is the extent of the relationship between knowledge obtained through professional training and secondary teachers' participation in legally required

special education meetings (i.e. Individualized Education Plan, 504, MDT and RTI)?

4. What is the extent of the relationship between knowledge obtained through professional training and secondary teachers' application of the legally required accommodations for students with disabilities in the classroom?

### **Description of Terms**

Focusing on the area of special education within the education profession necessitates an understanding of commonly used terminology, as follows:

**Board of Education of Hendricks Hudson Central School District v. Rowley:** decided in 1982, the Supreme Court issued a precedent ruling on the standard states are obligated to in complying with IDEA regulations pertaining to free and appropriate education (FAPE) (Board of Education v. Rowley, 1982; Johnson, 2003; Zirkel, 2014).

**Brown v. Board of Education of Topeka:** decided in 1954, the Supreme Court issued a ruling declaring the separation of black and white students in public schools was unconstitutional (Brown v. Board of Education of Topeka, 1954; Spaulding & Pratt, 2015).

**Case law:** regulations established by outcomes in judicial cases, especially cases heard by the U.S. Supreme Court (Conroy et al., 2008; Coots, 2007; Hurd & Piegrass, 2009; Musyoka et al., 2015).

**Co-teaching:** general and special education teachers working in the same classroom setting; collaborating in planning, teaching, and assessment responsibilities of special and general education students (Cramer et al., 2010; Gurgur & Uzuner, 2010; Hamilton-Jones & Vail, 2014).



**Due process:** process for parents or representatives of students with disabilities to advocate for remedy through the educational and/or judicial system for the education entitlements given under the law (Hurd & Piepgrass, 2009; IDEA, 2004; Skiba et al., 2008).

**Empowerment theory:** a theory developed by Brazilian educator Paulo Freire pertaining to the acts an individual or collective group take in gaining enough knowledge to feel more confident in working within the expectations and then sharing new knowledge and practice with others (Holcomb-McCoy & Bryan, 2010; Hur, 2006; Lumpkin et al., 2014; Ruechakul et al., 2015).

**Free appropriate education (FAPE):** Individuals with Disabilities Education Act (IDEA) mandates each student with a disability should receive an education at no cost to the parents in a placement appropriate to the student's needs and be part of the public school system (Conroy et al., 2008; Dieterich & Smith, 2015; Dretchen-Serapiglia, 2016; IDEA, 2004; Rice & Carter, 2015).

**Inclusion/inclusive education:** practice of ensuring students of all backgrounds and classifications are in the same school and general education classroom (Gokdere, 2012; Huber, Rosenfeld, & Fiorello, 2001; Sanders, 2015; Valeo, 2008; Wallace et al., 2002).

**Individualized education plan (IEP):** legal document guaranteeing a student with a disability to have personalized goals, services, and accommodations as decided on by the IEP team (Conroy et al., 2008; Fish, 2006; Samuels, 2015; Sanders, 2015; Zirkel, 2014).

**Individuals with Disabilities in Education Improvement Act (IDEIA) of 2004:** commonly referred to as IDEA of 2004, reauthorization of IDEA legislation which further emphasized the need for inclusion in education for students with disabilities (Conroy et al., 2008; Dieterich & Smith, 2015; IDEA, 2004; Rice & Carter, 2015; Sanders, 2015).

**Least restrictive environment (LRE):** to the greatest extent appropriate, a student with a qualifying disability must have the opportunity in the general education classroom with their peers (Dretchen-Serapiglia, 2016; IDEA, 2004; Sanders, 2015; Zirkel, 2014).

**Mills v. Board of Education of District of Columbia:** using *Brown v. Board of Education* (1954) as a precedent, the federal district court ruled in 1972 students with disabilities have the right to a public school education (*Mills v. Board of Education*, 1972).

**Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania:** U.S. District Court issued a ruling in 1972 declaring state laws excluding children with disabilities from public schools as unconstitutional (*PARC v. Commonwealth of Pennsylvania*, 1972; Spaulding & Pratt, 2015).

**The Education for All Handicapped Children Act of 1975 (EHA):** the first federal law to provide regulations and requirements for educating students with disabilities in public school settings, also provided federal funding and subsequent monitoring (EHA, 1975; Spaulding & Pratt, 2015).

### **Significance of the Study**

Legally and ethically, education is becoming more inclusive of all students with varied needs and disabilities (Samuels, 2015; Zirkel, 2014). Education personnel desire to have a greater understanding of how to successfully address the needs of all students in an inclusive setting (Brusca-Vega et al., 2014; Cancio et al., 2013; Combs et al., 2010; Fish, 2006; Gable et al., 2012; Gokdere, 2012; Gurgur & Uzuner, 2010; Kessell et al., 2009; Mueller, Singer, & Draper, 2008; Valeo, 2008). Universities with teacher preparation programs have begun to address these needs through teacher training programs, but there is still wide disparity in the extent of implementation (Burden et al., 2010; Eskay et al., 2012; Hamilton-Jones & Vail, 2014;

Johnson, 2015; Karge & McCabe, 2014; Lee et al., 2011; Ross & Lignugaris-Kraft, 2015). By assisting all educational personnel in better understanding the legal and ethical requirements of special education services, a more cohesive system of support providing students with disabilities help in achieving their learning goals will be created (Kessell et al., 2009; Lumpkin et al., 2014; Sanzo et al., 2011; Strieker et al., 2013).

This study focuses on empowering educators by increasing knowledge and understanding of special education legalities, developing confidence working within inclusive education, and enhancing the application of special education accommodations and modifications by general education teachers (Eskay et al., 2012; Hur, 2006; Kamil et al., 2015; Lumpkin et al., 2014; Perkins & Zimmerman, 1995; Wall & Palmer, 2015). Within the increasing focus on enhancing preparation for those entering the teaching profession in regard to supporting students with diverse needs, little attention has been on ensuring the knowledge of general education teachers meets the legal requirements governing students with disabilities and public education (Eskay et al., 2012; Gable et al., 2012; Weatherly, 2018; Zirkel, 2014). This study is unique due to focus on professional training as a method for empowering practicing teachers, both in special education and general education, to better serve those students with disabilities (Brusca-Vega et al., 2014; Combs et al., 2010; Kamil et al., 2015; Lumpkin et al., 2014). This professional training will empower new teachers as they enter the profession, regardless of certification pathway, as well as veteran teachers with years of experience. Typical professional development programs in schools focus more on the general education teacher needs, with example topics ranging from education standards implementation, test alignment and preparation, to classroom management (Combs et al., 2010; Kamil et al., 2015; Lumpkin et al., 2014; Wilson et al., 2012). Contributing to the importance of this research is the

focus on secondary grade level teachers, as traditionally they express the greatest lack of knowledge and acceptance of inclusive education requirements (Dretchen-Serapiglia, 2016; Pence & Dymond, 2016; Petersen, 2016; Sanders, 2015).

In addition to the theoretical importance of understanding inclusive principles, all school personnel need a constant awareness and understanding of the legal requirements within special education policies (Dretchen-Serapiglia, 2016; Holinka, 2018; Sanders, 2015; Weatherly, 2018; Zirkel, 2014). Typically, administrators and special education teachers receive training in special education legal regulations and case law standards, but there is a need for an expanded depth of understanding for implementation of successful inclusive education practices within general education services (Cancio et al., 2013; Dretchen-Serapiglia, 2016; Frost & Kersten, 2011; Sanagi, 2016). Under federal mandates and case law it is possible for schools, and teachers themselves, to be held legally accountable for carrying out inclusive education practices (Conroy et al., 2008; Etscheidt, 2007; McLeskey, Landers, Hoppey, & Williamson, 2011; Samuels, 2015). For example, in the civil case *Doe v. Withers* (1992) damages were awarded to the plaintiff against a teacher who refused adequate implementation of a student's IEP (Wright, 2015).

Regular professional training focused on special education will ensure educational staff are aware of the ever-changing laws and regulations (Abbas et al., 2016; Dretchen-Serapiglia, 2016; Zirkel, 2014). General education teachers, especially those who have been in the field for a greater length of time and those practicing in the secondary grade levels, lack a knowledge of specific requirements of legal regulations, updates in case law standards related to inclusion, and expectations of their role within special education (Abbas et al., 2016; Akalin et al., 2014; Dretchen-Serapiglia, 2016; Kosko & Wilkins, 2009; Sanders, 2015; Wasburn-Moses,

2005). Data will be obtained providing insight on the perspectives on inclusion from the varied educational staff in a school, with focus on secondary education certified teachers. Therefore, this study will provide information on the impact of targeted professional training in empowering general education teachers in meeting legal requirements guiding instruction of all students, especially those with disabilities, and implementing varied accommodations and teaching strategies within the classroom.

### **Overview of Research Methods**

Based on the empowerment theory (Archibald & Wilson, 2011; Hur, 2006; Perkins & Zimmerman, 1995; Stromquist, 2014; Wall & Palmer, 2015), as educators gain more knowledge on a specific aspect of education, the services they are able to provide to all student learners improve. Studying the effect of professional training focusing on legal requirements and inclusive teaching strategies on the empowerment of secondary teachers in working with students with disabilities in least restrictive education settings is the purpose of this research (Chant et al., 2009; Shurr, Hirth, Jasper, McCollow, & Heroux, 2014). To determine the impact, this study used a quantitative measure to determine the base of secondary teacher's knowledge of special education laws (Field, 2013; Sanders, 2015). Professional training was provided at each of the research sites focusing on the legal requirements of educational staff and best practices in teaching within an inclusive classroom. The professional training was provided to the research site participants by an expert in the field of special education (See Appendix G). Participants in the professional training participated in a post-training survey, as well as focus group discussions addressing application of the training information within teaching practices (Field, 2013; Ravitch & Riggan, 2016). Approval from the HRRC board at Northwest Nazarene

University was obtained in April 2017 prior to beginning data collection in the study (Appendix F).

Secondary teachers, certified in a variety of subjects for grades 6-12, were participants in this study. Elementary certified teachers, teaching in grades 6-9, also participated at some of the sites and served as an additional point of reference in the research analysis. Research indicated limited exposure for secondary certified teachers to special education training prior to the study (Abbas et al., 2016; Casale-Giannola, 2012; Sanagi, 2016; Sanders, 2015; Simon & Black, 2011). The disparity shown in the research on teacher training contributed to the selection of secondary school teachers as the focus population for this research study (Abbas et al., 2016; Casale-Giannola, 2012; Simon & Black, 2011). Participants were invited to participate in these trainings and research study from four school districts, with a variety of school types and sizes, in a western state. Five similar professional trainings were conducted at the approved school district sites (Appendix G). General education teachers across a variety of specialization, as well as special education certified teachers and administrative staff, were included in this study.

Mixed methodology, selected for this research, allows for considering and reviewing different aspects of the information, adding depth of understanding to data gathering (Marshall & Rossman, 2016; Sagoe, 2012; Smithson, 2000; Trainor, 2011; Wyatt, 2015). By utilizing tools of mixed methodology studies, the rigor of this study ensured useful and valid results were obtained to build further understanding (Marshall & Rossman, 2016; Sagoe, 2012; Smithson, 2000; Trainor, 2011; Wyatt, 2015). Mixed methodology studies allowing for personal insights into data are a useful tool within research in the special education field (Brantlinger et al., 2005; Odom, Brantlinger, Horner, Thompson, & Harris, 2005).

Surveys are a tool of quantitative research allowing for a broad range of data points to be gathered in an efficient manner from participants (Field, 2013; Koksal, Ertekin, & Colakoglu, 2014). A researcher then applies statistical analysis to determine the importance of specific factors or variables. To gain explanation for the statistical results qualitative methods, such as interviews or focus group discussions, are conducted and data added to the mixed method research study (Sagoe, 2012; Smithson, 2000; Trainor, 2011; Wyatt, 2015). For this study, focus group discussions increased the researcher's understanding when analyzing the patterns of empowerment and application for general education teachers in relation to inclusive education practices (Brantlinger et al., 2005; Odom et al., 2005; Sagoe, 2012; Trainor, 2011).

The Knowledge of IDEA survey, a 24-item, Likert-scaled questionnaire allowing participant educators to demonstrate attitudes and knowledge pertaining to the Individuals with Disabilities Education Act of 2004 was the primary quantitative instrument used in this study (Appendix C; Sanders, 2015). Additionally, the researcher gathered basic demographic information on the survey to allow for considering data in terms of teacher certification, experience, and training. This instrumentation tool was used prior to the professional training and after the training with those who participated in determining the extent of knowledge teachers in secondary school settings have of special education laws and regulations.

The first research question examined the base knowledge secondary teachers have of special education legal requirements. Since the study intended to determine the impact of professional training on improving inclusive education, measuring specific knowledge pertaining to teacher growth was fundamental to accurately determine the impact of the training. By administering the Knowledge of IDEA survey measuring specific aspects of the major special education federal law to possible teacher participants prior to the training, analysis of

scores in comparison to norms could be conducted (Dretchen-Serapiglia, 2016; Field, 2013; Sanders, 2015). The survey was designed to question specific areas of emphasis within special education legal regulations, based on the six principles within IDEA 2004 (IDEA, 2004; Sanders, 2015). Training participants knowledge of IDEA was analyzed using the survey after participation in the professional training to gather additional data perspectives (Field, 2013).

Exploring the extent of the impact of the professional training on legal requirements on the confidence secondary teachers have in serving students with disabilities in general education settings was the focus of the second research question (Shurr et al., 2014; Simon & Black, 2011). In developing this study, the empowerment theory developed by Paulo Freire was used as the framework for the design (Archibald & Wilson, 2011; Hipolito-Delgado & Lee, 2007; Hur, 2006). The theory posits the idea that growth in confidence will empower teachers to expand and improve their practices based on knowledge (Hipolito-Delgado & Lee, 2007; Hur, 2006; Wall & Palmer, 2015). The survey administered to training participants included questions requesting participant input on how they felt about the professional training and its' usefulness in the classroom. Additionally, in the focus group discussion, questions were posed specifically related to the teachers' confidence and feeling of empowerment pertaining to inclusive education services in their classrooms (Appendix I).

This study is based on the assumption inclusive education is ethically and legally important. Also, secondary school teachers, especially those who have been in the profession for a while, need increased training to assist knowledge growth to best serve students with disabilities (Conroy et al., 2008; Etscheidt, 2007; Huber et al., 2001; McLeskey et al., 2011; Samuels, 2015). Reviewing educational studies indicate though long-term professional development is the best method for increasing knowledge and implementation of inclusive



teaching practices, increasing teacher knowledge of special education is fundamentally important in serving all students in all content areas (Nishimura, 2014; Shurr et al., 2014; Simon & Black, 2011). The primary hypothesis of this research study is providing secondary teachers professional training to increase their knowledge of special education law and best practices for inclusive teaching will be an important tool for empowering teachers in instructing student with disabilities and increasing their participation in the IEP process and provision of accommodations in the classroom (Eskay et al., 2012; Kilanowski-Press, Foote, & Rinaldo, 2010; Shurr et al., 2014; Simon & Black, 2011).

Research questions three and four specifically focus on the relationship between the knowledge obtained in the training and the teachers' actions pertaining to inclusion in the classroom. Data from the Knowledge of IDEA surveys and information gained from the focus group discussions provided the researcher insight into the connection between the trainings and growth in inclusive teaching practices (Allen & Seaman, 2007; Field, 2013). Positive growth shown through the results of these questions support professional training as a worthwhile method of increasing successful inclusive practices and special education knowledge, especially on the secondary level. This will benefit all students, teachers, schools, and districts.

In addition to the quantitative portion of the study based on survey data, qualitative data was collected through focus groups ("Analyzing focus group data," 2017; Byers & Wilcox, 1988; Yao, 2015). Focus groups were utilized to gather information to deepen the analysis of the data gathered from the survey and increase the overall rigor of the study ("Analyzing focus group data," 2017; Brantlinger et al., 2005; Byers & Wilcox, 1988; Odom et al., 2005; Yao, 2015). The focus groups allow for more in-depth study and understanding of the impact of the training on educator knowledge and empowerment in teaching special education students

(“Analyzing focus group data,” 2017; Brantlinger et al., 2005; Byers & Wilcox, 1988; Odom et al., 2005; Yao, 2015). After the training, a small focus group constructed of participant educators, willing to share their insights, gathered at each site of the professional training to discuss how the training impacted actions in the day-to-day classroom (Appendix I). These groups were constructed of four to six educators. The researcher facilitated focus group discussion in person. Questions for the focus group were constructed based on information from research in inclusive education to facilitate the conversation focus on the impact of the training, teacher knowledge and empowerment, and inclusive actions in the classroom (Benedict et al., 2014; Guerra, 2015; Kleinert et al., 2015; Nishimura, 2014; Strieker et al., 2013). These guiding questions were piloted with educators to ascertain the most effective structure related to intent. Focus groups met for approximately 45 to 60 minutes each session. Information was audio recorded, transcribed by the researcher, and then coded by themes to determine level of impact of training and teacher empowerment (“Analyzing focus group data,” 2017; Brantlinger et al., 2005; Byers & Wilcox, 1988; Odom et al., 2005; Yao, 2015).

## **Chapter II**

### **Review of Literature**

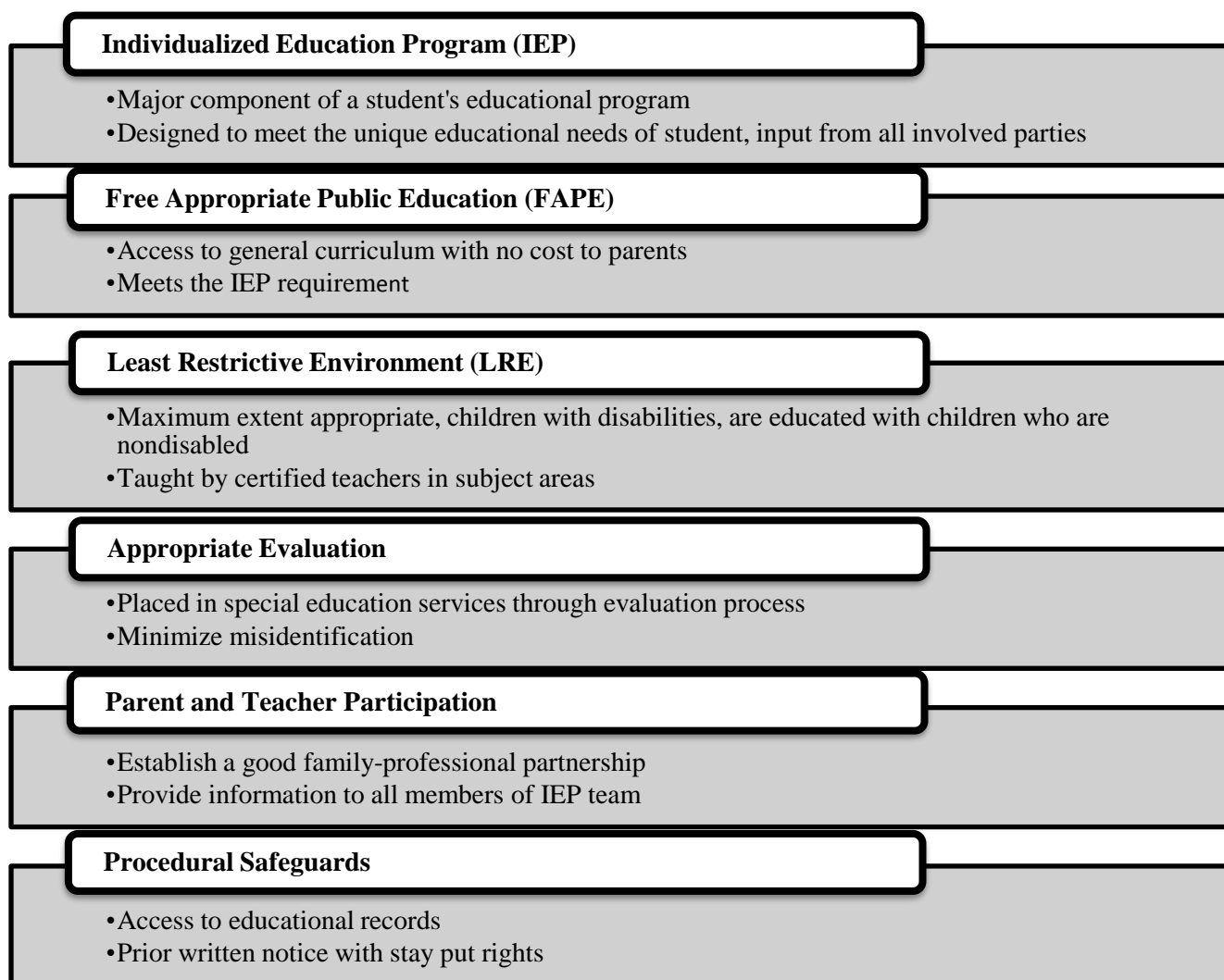
#### **Introduction**

From the time of colonization in the United States, the populace focused on providing systems to assist in attainment of knowledge. School systems within the states emulated the nation as it developed and expanded (Spaulding & Pratt, 2015; U.S. Department of Education, 2005). As public school systems developed, they became more inclusive of varied student populations (Spaulding & Pratt, 2015; U.S. Department of Education, 2005). In 1965, with the Elementary and Secondary Education Act, Congress addressed inequality in education, focusing attention on individuals with disabilities within public school systems (Spaulding & Pratt, 2015; Wright, 2016). Enactment of Public Law 94-142, The Education for All Handicapped Children Act of 1975, established all school systems receiving federal funding would be responsible to provide education to students with disabilities (Spaulding & Pratt, 2015; U.S. Department of Education, 2000; Wright, 2016).

This legislation evolved into the Individuals with Disabilities in Education Act (IDEA), the key special education law promoting six main principles in educating students with disabilities (IDEA, 2004; U.S. Department of Education, 2000). As seen in Figure 2, these six core ideas are an individualized education program (IEP) developed for a student with a disability, providing a free appropriate public education, services provided in the least restrictive environment (LRE), conducting an appropriate evaluation, parent and teacher participation, and complying with procedural safeguards (IDEA, 2004; Sanders, 2015). In 1997, the law was amended to include requirements for helping students with disabilities transition to life after K-12 schooling (IDEA, 2004; U.S. Department of Education, 2000). Additionally, the law was

further amended in 2004 to strengthen accountability of schools regarding supporting students with disabilities and expanding definitions for understanding the varied disabilities (U.S. Department of Education, 2010).

**Figure 2 - Major Components of Individual with Disabilities Education Act of 2004**



As advocate groups worked with Congress to develop legislation pertaining to education of students with disabilities, there were also challenges to traditional school system structures being raised through the court systems. The landmark case *Brown v. Board of Education of Topeka* (1954) signaled the beginning of public education being a harbinger of inclusiveness.

The Supreme Court ruled students' rights to equality were violated when educated in a separated environment (*Brown v. Board of Education*, 1954). Students with disabilities had been excluded from public education in a fairly comprehensive manner, but the cases *Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania* (1972) and *Mills v. Board of Education of District of Columbia* (1972) both resulted in rulings these exclusions were unconstitutional. These cases established precedent for the inclusion of students with disabilities within public education, in addition to what was happening legislatively ("The history of special education," 2015; Eskay et al., 2012; Samuels, 2015; Spaulding & Pratt, 2015). Case law would be important from this point forward in inclusive education policy as it continues to develop standards educators need to understand and follow in educating students with disabilities (Eskay et al., 2012; Samuels, 2015; Zirkel, 2014).

Today, the United States educates over 55 million students in public and private elementary and secondary schools (National Center for Education Statistics, 2017). Recent statistics indicate within the United States approximately 13% of the students in the public school system are receiving special education services, as classified under either IDEA or Section 504 of the Rehabilitation Act of 1973 (IDEA, 2004; National Center for Education Statistics, 2017; U.S. Department of Justice, 2009). This significant percentage of students classified as students with disabilities, having education plans governed by varied pieces of legislation and case law, emphasizes the need for all educational staff to be better informed of legal requirements (U.S. Department of Education, 2000; National Center for Education Statistics, 2017; Wright, 2016). Additionally, students classified under special education served in general education classrooms for a significant percentage of the day has grown from half in 2003 to 61% in 2013 (Samuels, 2015). As the number of special education students served in the

general education classroom continues to grow, further emphasis is placed on the need to better prepare all teachers for the challenges of teaching varied students (Boroson, 2017; Samuels, 2015).

### **Theoretical Framework: Empowerment Theory**

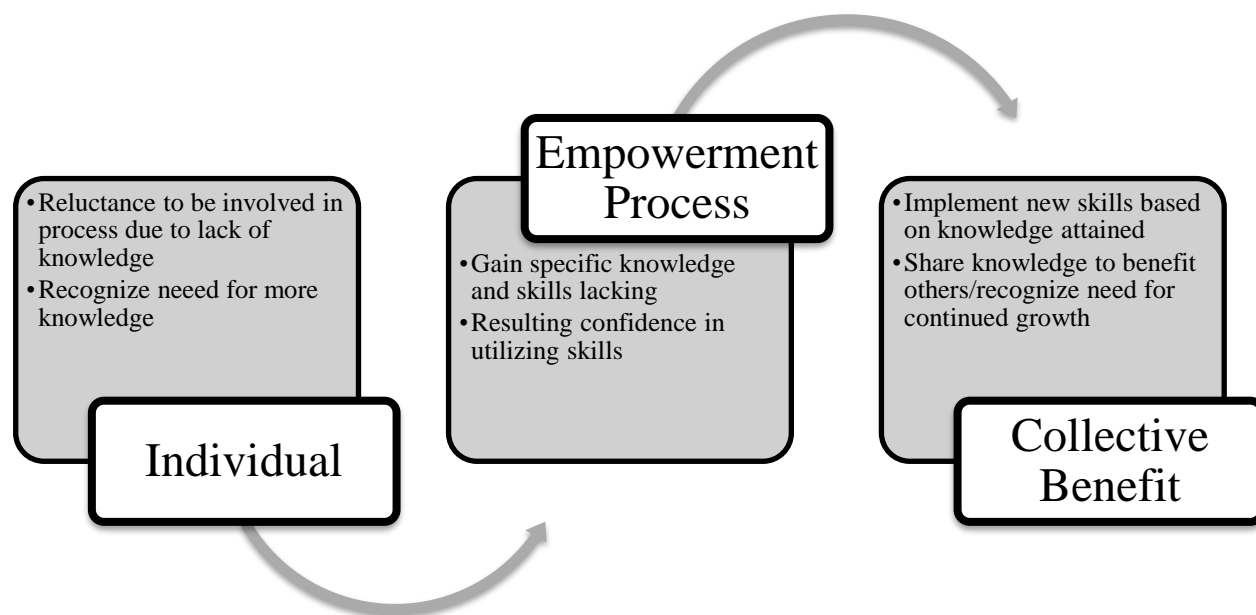
A growing population of students with disabilities increases demands placed on teachers, both special education and general education, as well as administrators servicing the student population in public schools throughout the United States (Frost & Kersten, 2011; Lumpkin et al., 2014; Thurston, 2013). This creates the need to gain knowledge improving and assisting in creation of enhanced educational experiences for all teachers and students involved in special education (Frost & Kersten, 2011; Lumpkin et al., 2014; Thurston, 2013). The empowerment theory is based on acquisition of knowledge enabling the ability of individuals in gaining skills necessary to successfully navigate the challenges of improving a current situation (Hipolito-Delgado & Lee, 2007; Hur, 2006; Perkins & Zimmerman, 1995). Confidence and desire to share acquired knowledge with others in improving a given situation is also inherent in the empowerment theory (Hipolito-Delgado & Lee, 2007; Hur, 2006; Perkins & Zimmerman, 1995; Wall & Palmer, 2015).

First developed in the 1960s by Paulo Freire, a Brazilian educator, empowerment theory asserted education was key to helping individuals learn and enact the skills necessary to overcome oppression and improve their life situations (Archibald & Wilson, 2011; Hipolito-Delgado & Lee, 2007; “Paulo Freire biography,” 2017; Wall & Palmer, 2015). Freire was active within Brazilian society in promoting literacy attainment as a means to empower the people to transform their living situations (Groves, 2011; “Paulo Freire biography,” 2017; Stromquist, 2014). Widely used in political reforms, the theory of empowerment has also

impacted a variety of fields, including social welfare, education, women's studies, health studies, management, and community psychology (Archibald & Wilson, 2011; Hipolito-Delgado & Lee, 2007; Hur, 2006; Wall & Palmer, 2015). Specifically, 1970s feminist groups promoted obtainment of literacy skills as a means for women to gain knowledge and the power to make changes in their lives throughout the world (Stromquist, 2014). More recently, advocates in the field of health care have adopted empowerment based prevention programs in teaching individuals to take preventative care to combat diseases such as HIV/AIDS (Romero et al., 2006).

In education, the theory of empowerment has evolved to support the concept of teaching and promoting knowledge attainment in an area increases the abilities of learners (Hur, 2006; Perkins & Zimmerman, 1995; Wall & Palmer, 2015). As shown in Figure 3, Empowerment Theory in Education, as knowledge and abilities in the learner increases, the confidence of the learner to operate in an area of challenge grows and the success rate expands (Hipolito-Delgado & Lee, 2007; Hur, 2006; Perkins & Zimmerman, 1995). School counselors working in public schools in the United States have adopted the empowerment theory as a method for working with students in need of overcoming different challenges (Hipolito-Delgado & Lee, 2007; Pearrow & Pollack, 2009). Teen Empowerment, specifically based on empowerment theory, is a program school-consultants are using to instruct students in needed skills and knowledge so students may change and improve situations challenging them within school and community settings (Pearrow & Pollack, 2009). Empowerment theory is promoted further in education settings by school counselors assisting students in learning skills to support the confidence to succeed in varied social settings (Hipolito-Delgado & Lee, 2007; Pearrow & Pollack, 2009; Zalaquett & D'Andrea, 2007).

**Figure 3 - Empowerment Theory in Education**



Application for empowerment theory exists in the realm of special education for all teachers needing to learn how to improve services to those with varied learning style needs and students with learning disabilities increasing the challenge of gaining education (Holcomb-McCoy & Bryan, 2010; Kamil et al., 2015; Perkins & Zimmerman, 1995; Ruechakul, et al., 2015; Wall & Palmer, 2015). Empowered teachers with greater knowledge of legal requirements and teaching strategies will better serve student learners struggling with different concepts (Holcomb-McCoy & Bryan, 2010; Hur, 2006; Kamil, et al., 2015; Perkins & Zimmerman, 1995; Ruechakul et al., 2015). School systems able to provide training to enhance the knowledge base of those involved in the education process, specifically in the challenging area of special education, enhance ability to serve educators and students impacted by the



different facets of the special education structure (Holcomb-McCoy & Bryan, 2010; Hur, 2006; Kamil et al., 2015; Perkins & Zimmerman, 1995; Ruechakul et al., 2015; Wall & Palmer, 2015).

Schools working with educators to provide needed training and preparation will help enhance skills and confidence in the area of special education. This will improve the education and services provided to students with disabilities in the inclusive settings mandated by IDEA (IDEA, 2004; MacGlaughlin & Mertens, 2014; Orr, 2009; Sanagi, 2016). Also, more resources and understanding supporting inclusion programs in schools eases the burden placed specifically on special education teachers (Brunsting et al., 2014; Burden et al., 2010; Hale, 2015; MacGlaughlin & Mertens, 2014; Perkins & Zimmerman, 1995; Van Garderen, Stormont, & Goel, 2012). Feeling more job satisfaction and having the support of colleagues contributes to increasing the likelihood teachers will remain in the profession (Brunsting et al., 2014; Burden et al., 2010; Hale, 2015; MacGlaughlin & Mertens, 2014; Perkins & Zimmerman, 1995). School districts providing meaningful and useful professional development and training opportunities to their educational staff will also empower those working with students with disabilities creating a better educational system for all (Benedict et al., 2014; Hale, 2015; Higginson & Chatfield, 2012; Nishimura, 2014; Van Garderen et al., 2012).

Currently, in education, empowerment as a concept is gaining popularity (Alrubail & Murray, 2015; Godbold, 2013; Ramdhani, Ancok, Swasono, & Suryanto, 2012; Wall & Palmer, 2015). Varied studies focusing on methods of empowerment for teachers reference professional training as a tool empowering teacher (Alrubail & Murray, 2015; Delisle, 2017; Godbold, 2013; Loewus, 2017; Rambo, 2017; Ramdhani et al., 2012). Studies indicate leaders or administrators in a school should provide opportunities and resources for teachers to seek both professional training and personal learning within the education profession to support teacher empowerment

(Alrubail & Murray, 2015; Delisle, 2017; Godbold, 2013; Ponomareva, 2015). To develop empowerment in working within the classroom, research studies encourage teachers seek personalized and advanced opportunities for their own professional training and growth (Godbold, 2013; Loewus, 2017; Rambo, 2017). Studies support the effectiveness of professional training in specific aspects of education enhancing the empowerment of teachers working within the area of focus (Delisle, 2017; Ramdhani et al., 2012).

### **Special Education Challenges**

#### **Attrition in the field.**

Public Law 94-142, the Education for All Handicapped Children Act of 1975 promoted the right of all students with disabilities to be educated in public schools (Spaulding & Pratt, 2015; U.S. Department of Education, 2000). Since this beginning law, regulations have increased in the level of certification a teacher must have to work with students with disabilities, as have the requirements for serving these students (“The history of special education,” 2015; IDEA, 2004; Wright, 2016). Individuals who enter the profession with high hopes and seeking to serve students with disabilities often face a harsh reality of the limitations in special education services (Hamilton-Jones & Vail, 2014; Thurston, 2013). Within IDEA are many requirements placing responsibility for conducting IEP meetings, collaboration, supporting students with disabilities in general education classrooms, and additional monitoring paperwork on special education teachers (Hale, 2015; Hamilton-Jones & Vail, 2014; IDEA, 2004; Thurston, 2013). Balancing all the additional requirements of the profession contribute to special education teaching being one of the most stressful roles in the field of education (Ansley, Houchins, & Varjas, 2016; Dewey et al., 2017; Hale, 2015; Hamilton-Jones & Vail, 2014; Thurston, 2013).

In tracking nationwide teacher shortages, the U.S. Department of Education lists special education as a field in which many regions of the country are dealing with issues resulting from the lack of adequate special education expertise (“Need for special education teachers,” 2015). A 2010 study in Nevada found after the first three years of teaching, 40% of special education teachers were leaving the profession in various ways, including transferring to the less demanding general education field (Splean & Caffarella, 2010). In 2013-2014, 49 of the 50 states reported a shortage of personnel in special education (Hale, 2015; “Special education personnel shortages factsheet,” 2017). The cost of teacher attrition is billions of dollars across the nation (Kain, 2011), with special education having the highest rate of attrition at nearly double the rate of general education teachers (Hale, 2015; Splean & Caffarella, 2010; Thurston, 2013; “Special education personnel shortages factsheet,” 2017).

The most recent data available indicates approximately 6.6 million, or about 13%, of students attending public schools in the United States are served under IDEA (IDEA, 2004; National Center for Education Statistics, 2017). The U.S. Department of Labor predicts a growth rate of 6% in the demand for special education teachers from 2014 to 2024 (Bureau of Labor Statistics, 2017). Demographic studies provide little proof age, gender, or ethnicity factor in the attrition rate, though school location does seem to have an impact (Berry & Gravelle, 2013; Johnson, 2015). Attrition rates in rural and at-risk schools are the most extreme (Kain, 2011). Rural schools must address the challenges which seem common to the field of special education with limited personnel resources which make the impact more serious in these districts (Berry & Gravelle, 2013). Though the rate of demand for special education teachers fluctuates, a constant shortage in the field reflects the need for further training all educators working with students with disabilities (Boe, 2006; Dewey et al., 2017).

Varied student needs in both type and severity, comparably high levels of legal regulation and mandates, and isolation from colleagues contribute to the highest attrition rates being with educators working in special education (Billingsley, 2004b; Brunsting et al., 2014; Hale, 2015; Prather-Jones, 2011). With current certified teacher mandates and laws governing least restrictive student placement, the attrition rate of special education teachers being nearly double in comparison to general education teachers is especially alarming (“Need for special education teachers,” 2015; Brunsting et al., 2014; Hale, 2015; “Special education personnel shortages,” 2017; Thurston, 2013). Replacing teachers who leave the field of special education is difficult and expensive (Kain, 2011). Schools are constantly seeking teachers to replace those who have left the field due to the high attrition rate among special education teachers (Billingsley, 2004a; Boe, Bobbitt, & Cook, 1993; Splean & Caffarello, 2010). Experienced special education teachers leaving the profession causes a lack of trained professionals to successfully mentor those entering the field (Thurston, 2013).

Education program stability and quality is harmed when teacher loss occurs on a regular basis (Boe et al., 1993; Darling-Hammond, 2016). Retention of special education teachers increases as support from colleagues and administration contributes to success within inclusive education (Allen, Grigsby, & Peters, 2015; Idol, 2006; Olson, Leko, & Roberts, 2016). Increased preparation and support provided for teachers in understanding special education services and regulations makes it more likely teachers are to feel confidence and better serve students with disabilities and work in this part of the profession (Akalin et al., 2014; Burden et al., 2010; Cramer et al., 2010; Gersten, Keating, Yovanoff, & Harniss, 2001; Gokdere, 2012; Karge & McCabe, 2014; Kessell et al., 2009; Strieker et al., 2013).

## **Legal Requirements**

Federal legislation, beginning with the passage of Section 504 of the Rehabilitation Act of 1973 and The Education for All Handicapped Children Act of 1975 and continuing on to the revisions of the Individuals with Disabilities in Education Act, mandates the integration and inclusion of students with disabilities in public schools (Spaulding & Pratt, 2015; “The history of special education,” 2015; Wright, 2016; Zirkel, 2014). First referred to as mainstreaming, the inclusion of students with disabilities into all aspects of public education, including placing them in least restrictive learning environments, challenges individuals in education including administration, special and general education teachers, support personnel, and students (IDEA, 2004; Otto & Arnold, 2005; Spaulding & Pratt, 2015). Administrators, as leaders in schools, must take the primary role ensuring the experience for all involved, from the students with disabilities and their families to special education and general education staff is successful (Kourkoutas, Eleftherakis, Vitalaki, & Hart, 2015; Mueller et al., 2008). An administrator who gains knowledge in special education regulations and concepts greatly assists both special education and general education teachers in making the educational experience more worthwhile (Demirdag, 2017; Idol 2006; Otto & Arnold, 2005; Sweigart & Collins, 2017).

Case law and revisions to the Individuals with Disabilities Act (IDEA) have placed ever increasing requirements on state and local governments creating special education laws and regulations (Holinka, 2018; Wright, 2016; Zirkel, 2014; Zirkel, 2018). The focus of state and federal lawmakers is in holding education personnel more accountable for the teaching strategies used and learning accrued by all students (U.S. Department of Education, 2000). The Individuals with Disabilities Act (IDEA) requires all students with disabilities be provided a free and appropriate public education in what is termed a least restrictive environment (IDEA, 2004;

Zirkel & Hetrick, 2017). Case law has further prompted movement towards full inclusion of students with disabilities in general classroom environments (Frost & Kersten, 2011; Samuels, 2015; Thurston, 2013; U.S. Department of Education, 2000; Zirkel, 2014; Zirkel & Hetrick, 2017). Revisions to IDEA through congressional action and legal case rulings continually changes the manner in which states align their special education systems to legal requirements (Holinka, 2018; Zirkel, 2014). Also, defining who is served under disability law continually changes, as does the manner of services (Daves & Walker, 2012; Samuels, 2015; U.S. Department of Education, 2005; Zirkel, 2014).

Laws regulating the education of students with varied legally recognized disabilities focus on equitable access to education services for students with disabilities (Dieterich & Smith, 2015; Wright, 2016). One key point of law developed by special education advocates include development of an individualized education plan (IEP) for qualified students by a team of involved educators and parents/guardians. The goal is to serve the student with the most educationally inclusive service possible (Cramer et al., 2010; U.S. Department of Education, 2005; Wright, 2016).

Under special education law and education programs, teachers are a necessary part of meeting student learning mandates and are legally obligated to provide accommodations within inclusive settings (Eskay et al., 2012; Grima-Farrell et al., 2014; Holinka, 2018). Special education teachers are especially needed to serve as facilitators (Gersten et al., 2001; “Need for special education teachers,” 2015), but there is also a need for increased understanding of instruction methods and legal requirements amongst all educators (Akalin et al., 2014; Casale-Giannola, 2012; Cramer et al., 2010; Eskay et al., 2012; Rice & Carter, 2015; Russell & Bray, 2013). Encouragement for increased training in educational legal requirements for general

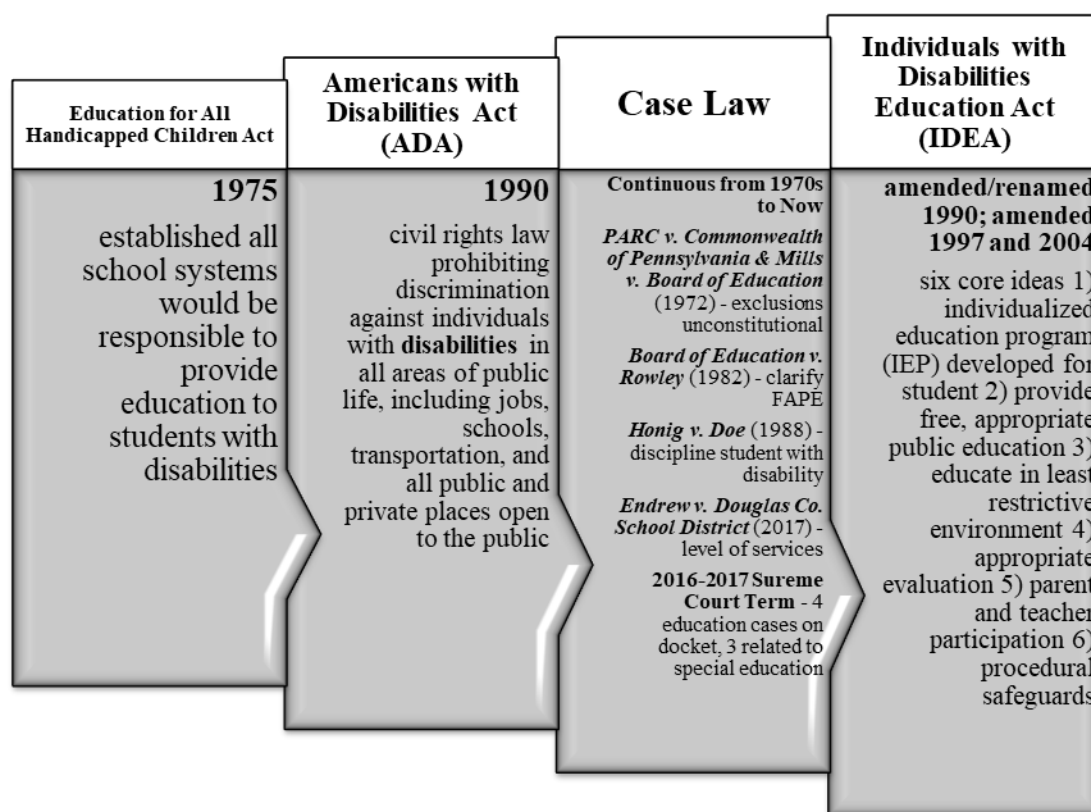
education teachers was offered by Julie J. Weatherly, Esq., attorney in special education law, at a recent national CASE Hybrid Conference for school administrators (Weatherly, 2018). She noted specifically the law included general education teachers in the IEP development process and to meet the intent of the law districts need to train their teachers in the process (Weatherly, 2018).

In providing students with disabilities a free and appropriate public education (FAPE) in the least restrictive environment (LRE), the individualized education plan (IEP) is fundamental (Damer, 2004; IDEA, 2004; Olson et al., 2016; Weatherly, 2018; Zirkel, 2014). Education agencies and their acting personnel are responsible for providing all the above to varied students with diverse needs (Damer, 2004; Daves & Walker, 2012; Holinka, 2018; IDEA, 2004; Zirkel, 2014). Many educators' express hesitation in their preparation and ability to assess and effectively implement the aspects of a student's needs as defined in an IEP (Debbag, 2017; Daves & Walker, 2012; Olson et al., 2016). School agencies legally liable for these services under IDEA must ensure personnel responsible for conducting the requirements of FAPE and LRE are prepared and confident in their abilities (Holinka, 2018; Olson et al., 2016; Weatherly, 2018; Zirkel & Hetrick, 2017).

As inclusive education for students with disabilities expanded, court systems in the United States ruled in precedent setting cases (Samuels, 2015; Spaulding & Pratt, 2014; Wright, 2016). These cases impact the structure of inclusive education in regular classrooms (Samuels, 2015; Wright, 2016). *PARC v. Commonwealth of Pennsylvania* (1972) and *Mills v. Board of Education of District of Columbia* (1972) reinforced federal standards declaring laws and policies excluding children with disabilities from schools were unconstitutional. A key case, *Board of Education of Hendricks Hudson Central School District v. Rowley* (1982) established a

clarified standard for Free Appropriate Public Education (FAPE) in regards to students with disabilities. The Education for all Handicapped Children Act, now referred to as the Individual with Disabilities Education Act (IDEA), first established students with disabilities should be provided with FAPE in 1975 (IDEA, 2004, Spaulding & Pratt, 2015, Wright, 2015). Case law, shown in Figure 4, clarifies how the law would be carried out in public schools (IDEA, 2004; Samuels, 2015; Wright, 2016).

**Figure 4 - History of Special Education Law**



Cases such as *Irving Independent School District v. Tatro* (1984) and *Honig v. Doe* (1988) further clarified related service requirements for schools. Specifically, in *Irving Independent School District v. Tatro* (1984), the Supreme Court established a burden of responsibility for school districts to support related medical services students with disabilities may need in participating in public educating settings. *Honig v. Doe* (1988), a case dealing with



school discipline of a student with a disability, expanded the concept of inclusive education and supports for students with disabilities in public education settings. According to the Supreme Court ruling in *Honig v. Doe* (1988), students with disabilities could not be excluded from educational services due to misbehavior, even if extreme, resulting from their specific disabilities. Due to this ruling, the revisions to the Individuals with Disabilities Education Act (IDEA) in 2004 included the process of a manifestation determination to assist states and schools in determining how to legally and appropriately determine discipline for students with disabilities (IDEA, 2004). Case law and legislation again intersected to impact daily actions taken by administrators and teachers within school districts (IDEA, 2004; Zilz, 2006).

Special education continues to be the most litigious of all issues related to schools (Samuels, 2017; Zirkel, 2014). Indicative of this, in the 2016-2017 term, the United States Supreme Court calendared four cases pertaining to education, three of these related specifically to special education (Samuels, 2017; Zirkel, 2014). Prior to this, the court had not granted certiorari to education cases for seven years (Samuels, 2017; Supreme Court of the United States, 2017). Due to the two cases heard by the Supreme Court and resulting issued rulings, educational agencies on federal, state, and local levels are reviewing policies and educating teachers on methods to improve services provided to students with disabilities (Samuels, 2017).

The United States Supreme Court recently issued rulings in the cases *Fry v. Napoleon Community School District* (2017) and *Endrew F. v. Douglas County School District* (2017). Each of these case rulings are impacting how education agencies currently implement legal requirements pertaining to students with disabilities (Kamenetz & Turner, 2017; Samuels, 2017; Walsh, 2017). In the case *Fry v. Napoleon Community School District* (2017), the Court ruled students with disabilities could seek remedies for disabilities outside of the procedures in IDEA.

This necessitates better informed school administrators and other personnel on related disability laws such as the American with Disabilities Act (ADA) (Walsh, 2017).

*Endrew F. v. Douglas County School District* (2017) more specifically relates to IDEA, with the Court weighing in on the level of education services mandated for an educational agency to provide for students with disabilities. The Court unanimously declared the standard of appropriateness in educational agencies' legal obligation to provide an appropriate education needed to increase (*Endrew v. Douglas County School District*, 2017; Kamenetz & Turner, 2017; Samuels, 2017; Zirkel, 2018). Education agencies and personnel must raise standards accordingly to comply (Holinka, 2018; Kamenetz & Turner, 2017; Samuels, 2017; Zirkel, 2018). Experts believe the decision rendered in *Endrew* will lead advocates and families of special education students to focus attention on the educational goals and outcomes of students with disabilities within public school systems (Holinka, 2018; Kamenetz & Turner, 2017; Samuels, 2017; "Understanding the Supreme Court Decision," 2017; Weatherly, 2018). The Supreme Court ruling serves as a strong indicator to school districts of their obligation to review IDEA and ensure school personnel are complying with all the premises of the law and interpretations by courts and state education departments (Holinka, 2018; "Understanding the Supreme Court Decision," 2017; Weatherly, 2018; Zirkel, 2018). Decisions made in courts will continue to shape inclusive education, emphasizing case law as an area of importance and understanding for teachers working with students with disabilities (Holinka, 2018; Wright, 2016; Zirkel, 2014).

## **Education Programs to Support the Efforts of Special Education**

### **Training the Teacher in Special Education.**

To preemptively counter the attrition rate of teachers plaguing the special education field for decades, universities and other invested parties must consider whether individuals entering

the field of education are adequately prepared for the challenges of the profession (Brunsting et al., 2014; Gersten et al., 2001). Research shows better preparing teachers entering the profession for the demanding realities of educating students with disabilities increases retention rates in the field (Lee et al., 2011; Karge & McCabe, 2014; Ricci & Zetlin, 2013). Intern teachers who believe they can successfully advocate with administrators and general education teachers, and as a result make a difference in their student's learning, are more likely to feel success and remain the profession (Daly-Cano, Vaccaro, & Newman, 2015; Grima-Farrell et al., 2014; Lee et al., 2011). As part of student teaching, individuals need to learn skills improving their abilities as student advocates within the realm of special education regulations and develop successful support systems within the school system (Daly-Cano et al., 2015; Lee et al., 2011; Ricci & Zetlin, 2013). Training in how to create more successful support systems within the school system for special education needs to happen for all stakeholders (Gable et al., 2012; Grima-Farrell et al., 2014; Lee et al., 2011; Ricci & Zetlin, 2013; Ross & Lignugaris-Kraft, 2015).

As laws focused more on inclusion and expanded services for students with disabilities, universities piloted a variety of strategies and teacher training programs to better prepare student teachers for the realities of the profession (Burden, et al., 2010; Eskay et al., 2012; Gable et al., 2012; Grima-Farrell et al., 2014; Hamilton-Jones & Vail, 2014; Ross & Lignugaris-Kraft, 2015). One unique program allowed for university supervisors to support the student teachers while they were having a more realistic experience of working with special education regulations and students (Grima-Farrell et al., 2014). Ross and Lignugaris-Kraft (2015) piloted a program where special-education undergraduate students were placed in classrooms full-time while completing their program of study, allowing the university to provide support and training while the program participants were facing the challenges of a full special education

classroom. Though successful in countering some of the problems believed to contribute to attrition of special education teachers, this resource intense program would be challenging for many schools and universities to use and fund (Grima-Farrell et al., 2014; Ross & Lignugaris-Kraft, 2015). Other university programs are working to have more integrated student teaching opportunities allowing all prospective teacher candidates to experience some interaction with students with disabilities (Akalin et al., 2014; Burden et al., 2010; Gokdere, 2012).

Limited program time and financial resources contribute to university teacher training programs prioritizing emphasis in education requirements (Grima-Farrell et al., 2014; Ross & Lignugaris-Kraft, 2015). After reviewing university education programs in the research area, the researcher found universities offering one course or less with emphasis on special education or diverse learner needs. Course emphasis within this limited program review showed focus on teaching strategies, with little or no instruction on the legal requirements impacting the general educator. Limited emphasis in teacher programs is not unique to the research area (Grima-Farrell et al., 2014; Guerra, 2015; Ross & Lignugaris-Kraft, 2015). Quotes such as “We read one chapter in a class, but it was a really quick overview of different special-ed(ucation) formats” and “I had some general course in college, but nothing to make it adequate” from a study done in Michigan on teacher training are typical (Guerra, 2015). Teachers from the Michigan study indicated a need to have specific training once they were in the classroom in order to have practical and applicable information (Guerra, 2015).

### **Family and Advocate Training Programs.**

Some schools and communities endeavor to educate the family members of students with disabilities to help them better understand their role in the education process (Akalin et al., 2014; Coots, 2007; Walker et al., 2012). Revisions in special education laws and court rulings

expanding the regulations guiding special education task schools with furthering the involvement of the student with disabilities in the Individual Education Plan (IEP) meetings (IDEA, 2004; Keyes & Brandon, 2012; Kurth, Lyon, & Shogren, 2014). Schools are further required to include advocates and family members who may have insights to improve the education process for the disabled student through Individual Education Plan (IEP) meetings and other services (Coots, 2007; Fish, 2006; Keyes & Brandon, 2012; Kurth et al., 2015; Murray, Handyside, Straka, & Arton-Titus, 2013). Schools able to create successful working relationships with advocates and parents in the community are better able to meet the education needs of the students with disabilities, have positive community support, and increase the satisfaction of educators working with this population of students and parents (Coots, 2007; Fish, 2006; Kourkoutas et al., 2015; Kurth et al., 2015; Mueller et al., 2008; Walker et al., 2012).

In the area of family advocacy, case law impacts the actions of school districts (Conroy et al., 2008; Fish, 2008; Mueller et al., 2008). Cases such as *Irving Independent School District v. Tatro* (1984) and *Cedar Rapids Community School District v. Garret F.* (1999) pertain to the related services schools must fund in providing educational services to students with disabilities. Since these services are discussed at IEP meetings, all members of the educational staff should be aware of the related services rulings (Irving v. Tatro, 1984; Menlove, Hudson, & Suter, 2001; Mueller et al., 2008). School staff must also work with parents to create systems benefitting the child without harming the public education system as a whole (Menlove et al., 2001; Mueller et al., 2008). Many parents perceive school personnel should have more extensive knowledge about educational services for children with disabilities (Conroy et al., 2008; Fish, 2008; McMenemy & Zirkel, 2003). Because of this, they are disappointed when the student's needs

are met in a manner advocates view as less than satisfactory (Conroy et al., 2008; Fish, 2008; McMenamain & Zirkel, 2003; Mueller et al., 2008).

*Schaffer v. Weast* (2005), *Jacob Winkelman v. Parma City School District* (2007), *Fry v. Napoleon Community Schools* (2017) and *Endrew F. v. Douglas County School District* (2017) are all cases where parents and/or advocates for students with disabilities were able to raise challenges to the services provided to students under IDEA. Though the rulings in such cases vary, the fact advocates continue challenging IDEA mandates in court indicates a need for school personnel to improve working relationships pertaining to inclusive education with the students and advocates (Conroy et al., 2008; Fish, 2008; McMenamain & Zirkel, 2003; Mueller et al., 2008; Murray et al., 2013).

#### **Administrator Training Programs.**

Administrators believing all individuals with diverse backgrounds and unique capabilities contribute to the growth of an educational community are the most effective leaders in building a healthy school community (Garrison-Wade et al, 2007; Goor & Schwenn, 1997; Ponomareva, 2015). A school administrator who embraces students with disabilities is able to assist in attaining the most growth and achievement in special education programs (Bonds & Lindsey, 1982; Garrison-Wade et al., 2007; Goor & Schwenn, 1997; Kourkoutas et al., 2015; Mueller et al., 2008). Training programs for administrators must provide experiences developing the acceptance of students with disabilities as important members of a learning community (Goor & Schwenn, 1997; Kurth et al., 2015; Mueller et al., 2008). Administrative training experience focused on inclusiveness can contribute to the success and increased support of special education teachers and inclusion programs for students with disabilities (Goor & Schwenn, 1997; Kurth et al., 2015; Mueller et al., 2008; Ponomareva, 2015). Administrators trained to believe teachers,

both special and general education professionals, are responsible for the education and achievement of all students are more likely to build instructional programs within a school which support success in inclusion (Bonds & Lindsey, 1982; Garrison-Wade et.al., 2007; Goor & Schwenn, 1997; Ponomareva, 2015; Sanzo et al., 2011).

Other elements of administrative training programs enhancing special education are instruction in confidentiality of record keeping, human resource management, knowledge of characteristics of students with disabilities and impact on student performance, understanding of monitoring and testing needs, and awareness of the importance of parental involvement (Goor & Schwenn, 1997; Sanzo et al., 2011). A high number of currently employed administrators believe they do not have a great enough understanding of legal regulations governing special education to effectively act in the administrative role (Garrison-Wade et.al., 2007; Goor & Schwenn, 1997). Universities operating in the era of mandated inclusive education should consider these expressed beliefs as cautionary information in developing administrative training programs (Garrison-Wade et al., 2007; Goor & Schwenn, 1997).

In an era of specific federal and state regulations, understanding and competence in managing inclusive special education programs are important attributes successful school administrators need to develop (Samuels, 2015; U.S. Department of Education, 2000). Effectively completing paperwork mandated by law, having time to plan for alternative schedules, and developing differentiated instruction strategies for use in general education classrooms for learners with disabilities are all top in the areas of support most needed by special education teachers (Ansley et al., 2016; Billingsley, 2004a; Billingsley, 2004b; Brownell, Smith, McNellis, & Miller, 1997; Hale, 2015). Thus, administrators expressing a lack of preparedness

for the demands of resource management unable to generate solutions for support in these areas should be of note for university preparation programs (Garrison-Wade et al., 2007).

Teachers indicate administrator knowledge of laws governing special education and effective implementation and support in dealing with state and federal regulations greatly enhances successful implementation of a special education program (Frost & Kersten, 2011; Littrell, Billingsley, & Cross, 1994; Otto & Arnold, 2005; Thurston, 2013). A study through the University of Colorado at Denver with practicing administrators as well as administrative trainees focused in special education reflected a high belief in the importance of inclusion of students (Garrison-Wade et al., 2007). The administrators in this study expressed the need for involvement of all teachers, both special and general education practitioners, in assisting with a diverse student population (Garrison-Wade et al., 2007). An additional research study through Eastern Michigan University strongly indicated the key to an education institution successfully using inclusion in teaching students with disabilities was the beliefs and support of administration (Orr, 2009). As laws continually change and states seek to develop the best systems for educating students with disabilities, awareness of all education personnel improves system effectiveness (Coots, 2007; Kurth et al., 2015; Samuels, 2015; Wasburn-Moses, 2005; Wright, 2016).

## **Supporting Special Education within School Systems**

### **System Structure Support**

In order to counter teacher attrition, school districts need to focus on factors contributing to teachers staying in the field (Billingsley, 2004b; Thurston, 2013). One key part of teacher satisfaction not well understood is job design. Gersten, Keating, Yovanoff, and Harniss (2001) studied altering factors in the special education teacher's job helping educators have a desire to



remain in the profession. The study found districts, administrators, and professional teacher organizations could all assist in altering the basic design of the job to make it more successful (Gersten et al., 2001). Restructuring of the job to improve interaction and collegiality with other educational staff increases job satisfaction for special education teachers traditionally isolated from the school (Garrison-Wade et al., 2007; Gersten et al., 2001; Thurston, 2013). Perception needs to change in connectivity of a school staff and environment in creating a whole building-level support system for special education including all administrators, such as the principal and assistant principal(s), teachers, and paraprofessionals (Garrison-Wade et al., 2007; Gersten et al., 2001; Goor & Schwenn, 1997).

A system of school support can increase a teacher's desire to remain in the profession (Billingsley, 2004a; Brunsting, et al., 2014; Ricci & Zetlin, 2013). Professional development incorporating both special education teachers and general education teachers promotes respect (Brusca-Vega et al., 2014; Kamil et al., 2015). This can assist and support special education teachers through conflicts and confusion in the demands of the job by creating more resources to rely on in addressing the challenges (Billingsley, 2004b; Brusca-Vega et al., 2014; Gersten et al., 2001; Goor & Schwenn, 1997; Kamil et al., 2015). Districts taking a more holistic approach in defining the role of instructor and assisting in making the job more manageable can counter stress felt by special education teachers leading to attrition (Brusca-Vega et al., 2014; Gersten et al., 2001; Keyes & Brandon, 2012).

### **Support through Teaching Practices.**

Laws mandating inclusive education for students with disabilities have led to many different practices in classrooms (Samuels, 2015; Weatherly, 2018). Co-teaching, when a general education teacher and special education teacher share a classroom of students and equitably

share in instruction time, is one of the different teaching models developed to increase support for special education regulations and students (Brusca-Vega et al., 2014; Cramer et al., 2010; Gable et al., 2012; Gurgur & Uzuner, 2010; Hamilton-Jones & Vail, 2014; Shaffer & Thomas-Brown, 2015; Strieker et al., 2013). When this model of teaching is supported and implemented correctly, many benefits result for all parties in practicing classrooms (Brusca-Vega et al., 2014; Shaffer & Thomas-Brown, 2015; Wallace et al., 2002). Nationwide implementation of co-teaching and supports available for increased inclusion vary greatly (Love et al., 2015; Samuels, 2015). Studies on co-teaching show a need for more understanding with all educators on best-practices for inclusion (Love et al., 2015; Samuels, 2015).

When co-teaching, special education and general education teachers are offered the same opportunities for professional development and are more often supported in efforts to attend professional development trainings together (Brusca-Vega et al., 2014; Shaffer & Thomas-Brown, 2015; Wallace et al., 2002). By attending professional development trainings jointly, special education and general education teachers increase collaboration, and the shared information leads to more effective implementation of practices in the classroom (Brusca-Vega et al., 2014; Shaffer & Thomas-Brown, 2015). In a shared classroom, all students benefit as the strengths of each teacher's training are utilized to the betterment of all students, both those with disabilities impacting learning and general education students (Brusca-Vega et al., 2014; Cramer et al., 2010; Gable et al., 2012). For example, special education teachers extensively trained in evidence-based practices enhance the application of similar teaching methods in varied classrooms, such as science and history (Brusca-Vega et al., 2014; Gable et al., 2012).

A benefit not foreseen from the development of co-teaching and collaboration between special education and general education teachers is the increased authority given to special

education teachers (Cramer et al., 2010; Wallace et al., 2002). Previously, special education teachers were relatively isolated from school staff, but with increased collaboration in the classroom setting both students and staff are recognizing special education staff as equal contributors to the education process (Brusca-Vega et al., 2014; Cramer et al., 2010; Wallace et al., 2002). Additionally, special education teachers are acknowledged as experts in teaching strategies proven to contribute to an increase in student learning and academic achievement (Brusca-Vega et al., 2014; Gable et al., 2012; Shaffer & Thomas-Brown, 2015). Equality in the professional roles of teachers, whether classified as special or general education, enhances the satisfaction special education teachers find in the profession and raises retention rates in schools (Billingsley, 2004b; Cramer et al., 2010; Wallace et al., 2002).

#### **Support by the Administration.**

The support of all levels of administration within the school system is key to job satisfaction and inclusion program implementation for educators working with students with disabilities (Allen et al., 2015; Idol, 2006; Littrell et al., 1994; Orr, 2009). Research shows administrative support leading to job satisfaction assists greatly in teacher retention (Cancio et al., 2013; Idol, 2006; Prather-Jones, 2011). Administrators play an important role in developing the collegial support sought by general and special education teachers (Allen et al., 2015; Prather-Jones, 2011; Shaffer & Thomas-Brown, 2015). Directed by the least restrictive environment guidance in the IDEA 2004, schools should work towards establishing successful programs of inclusion on all levels (IDEA, 2004; Orr, 2009). Administration support of inclusion training for personnel and allocation of needed resources is necessary for students and teachers involved in these programs to thrive (Allen et al., 2015; Idol, 2006; Orr, 2009).

Experienced special education teachers tend to believe they have more support from administrators, than do those teachers just beginning in the profession (Cancio et al., 2013; Otto & Arnold, 2005). Experienced teachers repeatedly emphasize the respect and appreciation received from their administrators is a major factor in their decision to remain in the profession (Brunsting et al., 2014; Cancio et al., 2013; Prather-Jones, 2011; Ricci & Zetlin, 2013). Newly graduated and hired special education teachers asked to compare inclusion programs also indicated administrative support as the main factor to determine successful implementation and achievement in the program for both teachers and students (Orr, 2009).

A recent doctoral research study by Dr. Emily Summey (2017) at the University of North Carolina at Greensboro indicates as the need for inclusion of special education students expand there is more work for administration to do with all services in a district. In a presentation at the Council of Administrators of Special Education Annual Conference November 2017, Summey emphasized administrators must ensure teachers and other school service personnel understand the obligation to implement IDEA regulations for all students with disabilities in all areas of education, such as transportation and food services. In her study, Summey (2017) emphasizes the many different court cases throughout the United States lead to the need for administrators to constantly and consistently review legal interpretation and impact on schools.

### **Special Education Services in Secondary Education**

Secondary education is unique within inclusive education strategies because general education expectations are different on this level than those when a student with disabilities first enters the education system (Alfaro et al., 2015; Cramer et al., 2010; Mastropieri et al., 2006; Nikolaros, 2014; Wallace et al., 2002; Wasburn-Moses, 2005). General education teachers on

the secondary level specialize in subject areas and are more focused on strategies to teach these enhanced content areas than on general teaching strategies characteristic of elementary education (Alfaro et al., 2015; Cramer et al., 2010; Mastropieri et al., 2006; Nikolaros, 2014; Wallace et al., 2002; Wasburn-Moses, 2005). Focused and enhanced subject curriculum often more difficult for students with disabilities to access without specialized learning skills is also more typical on the secondary education level (Carter et al., 2015; Mastropieri et al., 2006; Nikolaros, 2014; Wasburn-Moses, 2005). Thus, collaboration efforts between general education teachers and special education teachers focusing on creating strategies to assist students with disabilities learn specialized subject information along with their peers in the least restrictive environment improves the classroom as a whole (Carter et al., 2015; Mastropieri et al., 2006; Nikolaros, 2014; Wasburn-Moses, 2005).

Special education and general education teachers must work together to facilitate inclusive education to best serve all students, those with and without disabilities, in the classroom (McLeskey et al., 2011; Nikolaros, 2014; Wasburn-Moses, 2005). The foundational idea all types of students can expand social learning skills through inclusive education practices is the most widely accepted by both special and general education teachers (Alfaro et al., 2015; Cramer et al., 2010; Mastropieri et al., 2006; Wallace et al., 2002; Wasburn-Moses, 2005). Building this widely accepted belief into strategies for inclusive education can enhance academic services within the general education classroom for all students (Carter et al., 2015; Chant et al., 2009; Wasburn-Moses, 2005). An example of a strategy based on such a belief enhancing academic performance is peer-supported inclusive teaching (Carter et al., 2015; Kessell et al., 2009). This type of strategy provides a method for special education teachers to facilitate the use of general education students to enhance the learning taking place for students

with disabilities under the instruction of general education teachers (Carter et al., 2015; Kessell et al., 2009). Thus, peer support strategies are a prime example of inclusive education using collaboration of all individuals involved to enhance education services (Carter et al., 2015; Kessell et al., 2009). Expanding knowledge and services through collaboration additionally is a component of the empowerment theory basis for the research study (Holcomb-McCoy & Bryan, 2010; Hur, 2006; Lumpkin et al., 2014; Ruechakul et al., 2015).

As time passes, more secondary teachers and specialized programs realize benefits in creating strategies for including students with disabilities, aside from the need to meet legal requirements (Abbas et al., 2016, Dieterich & Smith, 2015; Kessell et al., 2009; Nikolaros, 2014). Career and technical education is a prominent part of modern education programs, especially within secondary education (Casale-Giannola, 2012; Dieterich & Smith, 2015; Kessell et al., 2009). In these areas, university programs are beginning to develop co-teaching and collaborative teaching strategies enhancing teachers' understanding of inclusive practices (Casale-Giannola, 2012; Dieterich & Smith, 2015; Kessell et al., 2009; Love et al., 2015). University programs for career and technical education are also focusing on assisting professionals in these areas to meet legal requirements for students on the secondary school level and transitioning to post-secondary studies (Casale-Giannola, 2012; Dieterich & Smith, 2015; Kessell et al., 2009). Experts supporting CTE instructors throughout the nation are offering resources for CTE trained teachers in participating in IEP meetings (Mahadevan, Grenwelge, & Peterson, 2014). Active participation is encouraged to both comply with legal mandates and help CTE programs thrive as a least restrictive environment (LRE) for special education students (Mahadevan et al., 2014).

Science, a core secondary subject, is a field where many schools and teachers are looking to develop co-teaching and collaborative programs allowing for more hands-on learning strategies, especially beneficial for students with disabilities (Brusca-Vega et al., 2014; Gable et al., 2012; Love et al., 2015; Mastropieri et al., 2006). With emphasis on lab work, science lends itself to the participatory learning style promoted within co-teaching strategies (Brusca-Vega et al., 2014; Gable et al., 2012; Love et al., 2015; Mastropieri et al., 2006). Another area where assistive technology is creating new avenues of learning for students with disabilities is within music study. Assistive technology allows for students with disabilities inhibiting participation in music education in the traditional manner to participate with tools compensating for their disabilities (McCord & Watts, 2010; McMenamin & Zirkel, 2003). Music instructors at some universities are gaining instruction in these strategies as part of certification programs (McCord & Watts, 2010; McMenamin & Zirkel, 2003).

Though there have been gains in select areas of secondary curriculum, there is still need to enhance the general education teacher's understanding of their role in inclusive education (Abbas et al., 2016; Alfaro et al., 2015; Etscheidt, 2007; Kleinert et al., 2015; McLeskey et al., 2011; Ryndak et al., 2014; Weatherly, 2018). The least restrictive environment provision of the Individuals with Disabilities Education Act (IDEA) requires students with disabilities be educated along with their typical peers, but on the secondary level teachers often question whether students with disabilities can learn the same level of curriculum (McLeskey et al., 2011; Nikolaros, 2014). At times, secondary teachers promote the idea of involvement of students with disabilities in social aspects of secondary school life, but receiving instruction more on their academic level through direct instruction in a separate class (McLeskey et al., 2011; Nikolaros, 2014; Ryndak et al., 2014). As teacher's gain knowledge of adaptive instruction strategies, they

are more likely to welcome the inclusion of students with disabilities in secondary classrooms and meet legal and theoretical requirements of instruction for these students mandated by legislation and case law (Abbas et al., 2016; Dieterich & Smith, 2015; Kessell et al., 2009; Nikolaros, 2014).

For more than two decades universities have recognized a need for increased training and emphasis on servicing needed modifications and adaptations for students with disabilities to achieve inclusive classrooms (Laprairie, Johnson, Rice, Adams, & Higgins, 2010; Sapona et al., 2006; Zagona, Kurth, & MacFarland, 2017). A 2006 report from the University of Cincinnati and the Holmes Group discussed how university faculty in general education and special education needed to unify and instruct teacher candidates in key skills to best serve all students within inclusive classrooms (Sapona et al., 2006). A few years later, a 2010 study at Sam Houston State University with 75 students in the secondary teacher training program found a lack of preparation in key areas related to inclusive education (Laprairie et al., 2010). The faculty study emphasized topics needing further emphasis in training included knowledge of IDEA, IEPs, and 504 regulations, modifications used in inclusive education, and methods of collaboration (Laprairie et al., 2010).

Current studies still reflect teachers seek more training and preparation in these same areas (Alrubail & Murray, 2015; Delisle, 2017; Zagona et al., 2017). A mixed method study focusing on administrators and general education teachers indicated a significant desire for further training through university study and professional development on inclusive teaching methods (Zagona et al., 2017). cursory researcher review of university education programs related to inclusive education found the majority of teacher training curriculum still limited to one class or a focused unit within a course on diverse learning.



## **Strengthening Special Education as Laws and Practices Change**

### **Professional Development**

In general, most modern education personnel accept students with disabilities belong in and benefit from inclusion in regular classrooms (Akalin et al., 2014; Brusca-Vega et al., 2014; Casale-Giannola, 2012; Doktor, 2010; Garrison-Wade et al., 2007; Musyoka et al., 2015; Samuels, 2015). Inclusive or integrated education is an important aspect of the modern era of education (“The history of special education,” 2015; MacGlaughlin & Mertens, 2014; Spaulding & Pratt, 2015). Universities are focusing more on training teachers about inclusive practices required in their classrooms (Akalin et al., 2014; Burden et al., 2010; Eskay et al., 2012; Gokdere, 2012; Lowrey et al., 2017). On the secondary level, different subject areas are focusing on types of teaching strategies benefitting students with disabilities within programs (Casale-Giannola, 2012; Doktor, 2010; Love et al., 2015). The expansion of inclusive education, students with disabilities being included in all aspects of public schooling, requires both general and special education teachers to ensure access to education services is successful (Holinka, 2018; Pellegrino, Weiss, & Regan, 2015; Weatherly, 2018; Zirkel, 2018).

Many teachers, however, are still reluctant to fully support inclusion even though they express support of the concept of inclusion (Akalin et al., 2014; Cancio et al., 2013; Combs et al., 2010; Gable et al., 2012; Gokdere, 2012; Kurth et al., 2015; Musyoka et al., 2015; Rice & Carter, 2015; Strieker et al., 2013). Teachers may be willing to teach only students with certain types of disabilities or use inclusive practices in a limited sense (Akalin et al., 2014; Cancio et al., 2013; Casale-Giannola, 2012; Combs et al., 2010; Cramer et al., 2010; Gable et al., 2012; Gokdere, 2012; Kessell et al., 2009; Kurth et al., 2015; Musyoka et al., 2015; Rice & Carter, 2015; Strieker et al., 2013). Teachers being responsible to instruct an increased number of

students and the type of schedule required may explain the reluctance of secondary teachers to support full inclusion (Ginger, 2006). Secondary level teachers are often hesitant in supporting full inclusion as they may believe students with disabilities are unable to work at the advanced levels in specific subject matter (Akalin et al., 2014; Casale-Giannola, 2012; Idol, 2006; Kessell et al., 2009; Musyoka et al., 2015; Rice & Carter, 2015). Teachers also express reluctance in full inclusion practices believing the behaviors of students with disabilities will distract from educational progress for all students (Idol, 2006; Kessell et al., 2009; Musyoka et al., 2015).

Professional development, an accepted process for developing staff capabilities in education, should be a tool used to empower teachers serving students with specified needs under special education law (Doktor, 2010; “Engaging the potential,” 2016; Nishimura, 2014). As inclusive education practices become more mandated within special education, some schools have turned to professional development to assist teachers in developing needed skills to build success (Benedict et al., 2014; Bradshaw, 2015; Doktor, 2010; “Engaging the potential,” 2016; Higginson & Chatfield, 2012; Nishimura, 2014; Peter, 2013; Sargent, Gartland, Borinsky, & Durkan, 2009; Shurr et al., 2014). Creating confidence in teachers adjusting to the demands in meeting diverse needs of students is obtainable through effective professional development (Bradshaw, 2015; Kennedy & Shiel, 2010; Nishimura, 2014; Shurr et al., 2014).

Professional development tried by schools often targets support of specific learning disability categories and is voluntary for teacher participation (Bradshaw, 2015; Kennedy & Shiel, 2010; Nishimura, 2014; Shurr et al., 2014). Though professional development programs are being developed to expand knowledge and confidence of educators in meeting the needs of students with disabilities, these professional development opportunities are often focused primarily on special education teachers or specific topics (Benedict et al., 2014; Peter, 2013;

Shurr et al., 2014). Professional development opportunities including general education teachers have rarely focused on legal mandates or general information pertaining to successful accommodations in a general education classroom for students with disabilities (Dretchen-Serapiglia, 2016; Nishimura, 2014; Peter, 2013; Shurr et al., 2014).

Teachers College Inclusive Classroom Practice (TCICP) is an example of professional development offered to currently employed teachers as they develop inclusive practices in working with students (Schlessinger, 2017). Emphasis on the importance of inclusive education practices is given in a once a month workshop for 10 to 30 teachers facilitated by a professional trainer (Schlessinger, 2017). Teachers bring working examples as material for discussion and study seeking inclusive solutions (Schlessinger, 2017). As the project unfolded, participating teachers report a desire to implement inclusive practices within their respective schools (Schlessinger, 2017).

Training teacher candidates in improved collaboration techniques to enhance inclusive education was the focus of a professional development study at George Mason University (Pellegrino et al., 2015). Researchers based this study on the need in teacher education programs to increase preparation incoming teachers have for the necessary collaboration between disciplines in schools to meet the needs of diverse students (Pellegrino et al., 2015). A focus group of candidates were selected to receive specific training on skills needed for successful collaboration (Pellegrino et al., 2015). Researchers found growth in teacher candidate ability to work in a collaborative team to meet diverse student needs. Also, Pellegrino et al., (2015) were surprised this study contributed to what they termed rejuvenation amongst the teaching faculty involved. Additionally, this study revealed teachers wanted more specific information on strategies for accommodations, the IEP process, and training once working in the

field (Pellegrino et al., 2015). As this study shows, targeted training assists teachers and empowers them to desire more knowledge.

### **Professional Training**

Professional training is a tool schools may use in supporting the acquisition of knowledge by teachers pertaining to legal requirements and constantly expanding case law standards in special education (Akalin et al., 2014; Alfaro et al., 2015; Etscheidt, 2007; Kosko & Wilkins, 2009; Samuels, 2018; Sargent et al., 2009). Professional training is more focused on specific need to know information, rather than an expansive professional development program which takes longer to develop and sustain (Benedict et al., 2014; Bradshaw, 2015; Burden et al., 2010; Delisle, 2017; Diliberto & Brewer, 2012; Higginson & Chatfield, 2012; Kosko & Wilkins, 2009; Shurr et al., 2014). Practicing teachers indicate a desire for increasing knowledge related to any aspect of special education law and accommodations allowing for inclusion, expressing a growth in confidence in teaching students with disabilities when provided with knowledge in these areas (Alrubail & Murray, 2015; Akalin et al., 2014; Alfaro et al., 2015; Chant et al., 2009).

Professional training can focus on presenting a variety of information. This includes the following: behavior management strategies, curriculum adaptation or accommodation strategies, or steps to improve participation in an IEP (Gable et al., 2012; Garland, Garland, & Vasquez, 2013; Kennedy & Shiel, 2010; Kosko & Wilkins, 2009; Melekoglu, 2013). District and schools can also support teachers learning knowledge through self-directed professional training (Burden et al., 2010; Kowalski, Lieberman, & Daggett, 2006; Loewus, 2017; Shurr et al., 2014). Teachers indicate professional training enhances their ability to support inclusive education as long as the training focuses on any aspect of special education, irrespective of the topic (Gable

et al., 2012; Garland et al., 2013; Kennedy & Shiel, 2010; Kosko & Wilkins, 2009; Melekoglu, 2013).

### **Need for Continued Strengthening of Special Education**

The reluctance of teachers to implement inclusive practices pertaining to students with disabilities in their classrooms generally stems from a lack of understanding of legal regulations or teaching strategies and accommodations assisting in creating a successful educational experience for all students (Akalin et al., 2014; Cancio et al., 2013; Casale-Giannola, 2012; Combs et al., 2010; Cramer et al., 2010; Gable et al., 2012; Gokdere, 2012; Kessell et al., 2009; Kurth et al., 2015; Musyoka et al., 2015; Rice & Carter, 2015; Strieker et al., 2013). General education teachers have difficulty articulating specific roles and responsibilities in educating students with learning disabilities, and, thus, do not fully understand their obligations to these students (MacGlaughlin & Mertens, 2014; Sanzo et al., 2011; Valeo, 2008).

Teachers feeling their general education classes are becoming more curriculum and assessment driven believe they lack training and administrative support in how to transition special education students into their classes successfully (Sanzo et al., 2011; Valeo, 2008). Some general education teachers believe the responsibility and support of special education students should be borne solely by special education instructors and is not their responsibility (Combs et al., 2010; MacGlaughlin & Mertens, 2014; Valeo, 2008). A variety of reasons are given for this belief, including general education teachers not having adequate time to adjust curriculum to meet instructional needs of the students with learning disabilities and training special education instructors receive promoting success with students with disabilities (Combs et al., 2010; Shaffer & Thomas Brown, 2015; Valeo, 2008).

One of the area's most in need of focused training is teacher participation in the individualized education plan (IEP) meeting conducted annually on behalf of the student's learning experience (Diliberto & Brewer, 2012; Etscheidt, 2007; Holinka, 2018; IDEA, 2004; La Salle, Roach, & McGrath, 2013; Menlove et al., 2001; Weatherly, 2018; Zirkel, 2014; Zirkel, 2018). The IEP is the instrument designed by law to allow the student, parents/guardians, and educators a formal method of collaborating on accommodating the student's learning disability while still providing quality education services to the student in the least restrictive education setting (Conroy et al., 2008; Diliberto & Brewer, 2012; Etscheidt, 2007; IDEA, 2004; U.S. Department of Education, 2000). IDEA (2004) requires certain individuals, each with specific areas of expertise and knowledge, to participate in developing an IEP to provide educational progress for the student with a disability, as shown in Table 1 (Conroy et al., 2008; Diliberto & Brewer, 2012; Etscheidt, 2007; Rotter, 2014; U.S. Department of Education, 2000).

**Table 1 - Required IEP Team Members' Areas of Expertise**

AREA	SOURCE	Why is this Important?
Student Background	Family and/or Legal Guardian & Student (after age 16)	*Educate family on purpose and process of IEP *Background and detail on student's strengths and challenges *Discuss successful and unsuccessful strategies previously tried *Student advocate for self during transition meetings
Laws and regulations	LEA representative/school administrator	*Legal knowledge to answer questions on procedure and parameters of included services *Knowledge of and authority to commit resources from school or district
Assessments/Data interpretation	Related service personnel	*Expert to interpret scoring on any assessments used in evaluations *Relevance of data to student's strengths and area of focus
Curriculum	General education teacher	*Share knowledge of standard course of study *Address grade level curriculum in plan *Share information on typical peer performance

*Note:* IEP = individualized education program; LEA = local education agency; Related services personnel include such specialists as psychologists, speech-language pathologists, occupational and physical therapists. **Source for table – (Diliberto & Brewer, 2012; IDEA, 2004)**

General education teachers are required by law to attend annually held IEP meetings and participate wholly in designing plans to best serve student needs in varied classroom settings (Etscheidt, 2007; Fish, 2008; IDEA, 2004; Kowalski et al., 2006; La Salle et al., 2013; McCord & Watts, 2010). However, many teachers, especially on the secondary level, choose not to attend or only participate in this process in a rudimentary fashion (Etscheidt, 2007; La Salle et al., 2013). This is partially due to the excusal provision included in the 2004 revision of the Individuals with Disability Education Act, allowing for educators not directly involved in the student's education be excused from the IEP meeting (Etscheidt, 2007; IDEA, 2004; La Salle et al., 2013). Secondary level teachers tend to interpret this as a reason for lack of attendance if the student's IEP meeting would not involve any major curriculum adjustment (Etscheidt, 2007; IDEA, 2004; La Salle et al., 2013). Due to the requirements to provide appropriate education in the least restrictive environment possible, active participation of general education teachers is important to the success of the IEP meeting (Etscheidt, 2007; Holinka, 2018; IDEA, 2004; Rotter, 2014; Weatherly, 2018). General education teachers are instrumental in providing information pertaining to curriculum standards, typical peer performance, and possible accommodations allowing for success in the LRE within specialized subject classrooms (Etscheidt, 2007; IDEA, 2004; La Salle et al., 2013; Rotter, 2014; Weatherly, 2018).

Parents and other advocates have expressed frustration the IEP process, especially in the progression to the secondary level, is not robust enough and does not truly identify the individual strengths and needs of the student(s) (Etscheidt, 2007; Fish, 2006; Fish, 2008; La Salle et al., 2013). Revisions of state guidelines under IDEA are directing IEP meetings to more actively promote the inclusion of parent and teacher input (IDEA, 2004; La Salle et al., 2013). Additionally, cases such as *Andrew F. v. Douglas County School District* (2017), with parents

arguing schools need to require more than minimum progress in student learning to meet the requirements of free and appropriate education, are arising in the court system. Since the IEP meeting is the tool to facilitate more teacher and parent focus on individual student adaptations, general education teachers need preparation enabling full participation in these meetings (Conroy et al., 2008; Etscheidt, 2007; Rotter, 2014; Weatherly, 2018). By lending subject specific instruction strategies to planning for the full inclusion of the student, the standard of more appropriate progress measures may be met and students with disabilities are more likely to achieve at a greater rate (Conroy et al., 2008; Etscheidt, 2007; IDEA, 2004; Kowalski et al., 2006; La Salle et al., 2013; Menlove et al., 2001; Rotter 2014).

## **Conclusion**

Society has evolved in the value it places on inclusiveness for all individuals. Current laws governing special education reflect these values (Burden et al., 2010; “The history of special education,” 2015; Samuels, 2015; US Department of Education, 2000). Teachers expressing the desire to have special education students placed in a setting other than the regular classroom, believing the students would have more success, need education in the value of creating success for all members of the learning community (Combs et al., 2010; Sanzo et al., 2011; Valeo, 2008). An increasing focus on preparation for inclusive education is of note in some university teacher preparation programs (Burden et al., 2010; Cramer et al., 2010; Dieterich & Smith, 2015; Garrison-Wade et al., 2007; Gokdere, 2012; Hamilton-Jones & Vail, 2014; Lee et al., 2011; Ricci & Zetlin, 2013). However, teachers active in the profession, both general and special education trained, need continuous support and current training to make inclusive education a successful opportunity for all (Akalin et al., 2014; Brunsting et al., 2014; Casale-Giannola, 2012; Combs et al., 2010; Cramer et al., 2010; Dieterich & Smith, 2015;



Eskay et al., 2012; Gokdere, 2012; Gurgur & Uzuner, 2010; Kurth et al., 2015; Musyoka et al., 2015; Rice & Carter, 2015; Shaffer & Thomas-Brown, 2015; Strieker et al., 2013).

As laws are revised and teaching strategies are developed, teachers desire knowledge to increase their abilities in assisting students with disabilities in growth and achievement (Akalın et al., 2014; Brunsting et al., 2014; Casale-Giannola, 2012; Combs et al., 2010; Cramer et al., 2010; Dieterich & Smith, 2015; Eskay et al., 2012; Gokdere, 2012; Gurgur & Uzuner, 2010; Kurth et al., 2015; Musyoka et al., 2015; Rice & Carter, 2015; Shaffer & Thomas-Brown, 2015; Strieker et al., 2013). Research shows training and professional development increases teacher confidence in their abilities to successfully meet the demands of educating students with challenging disabilities (Idol, 2006; Mereoiu, Abercrombie, & Murray, 2016; Mette, Nieuwenhuizen, & Hvidston, 2016). Pedagogical and legal knowledge assists teachers in successfully supporting inclusive educational programs (Idol, 2006; Kosko & Wilkins, 2009; Mette et al., 2016; Zirkel & Hetrick, 2017).

Theoretically, providing a process allowing continuous expansion of teacher knowledge about special education legal requirements, while specifically developing accommodations providing education services to students within inclusive classrooms, assists schools in meeting legal mandates of education law (IDEA, 2004; Samuels, 2015; Weatherly, 2018; Zirkel & Hetrick, 2017). Also, this type of process assists teaching staff in successfully meeting educational needs of students with varied disabilities (Hur, 2006; Perkins & Zimmerman, 1995; Samuels, 2015; Zirkel & Hetrick, 2017). Some districts have begun to successfully build on their co-teaching programs by enabling teachers to attend professional development in core subject areas together enhancing knowledge attainment as an educational team (Brusca-Vega et al., 2014; Casale-Giannola, 2012; Rice & Carter, 2015; Shaffer & Thomas-Brown, 2015).

Others have participated in training programs pertaining to inclusion, communication, or for support personnel (Da Fonte & Capizzi, 2015; Kosko & Wilkins, 2009; Mereoiu et al., 2016). In general, though, this type of professional development is limited in scope and subject-based, rather than keying on specific aspects of special education law and instructional strategies and accommodations important for educators to understand (Casale-Giannola, 2012; Rice & Carter, 2015; Samuels, 2015; Shaffer & Thomas-Brown, 2015; Wasburn-Moses, 2005).

As education settings become more and more inclusive, teachers are seeking means to gain knowledge on specific aspects of special education laws, teaching strategies and accommodations in order to improve the services they provide specifically to increasing numbers of students with disabilities (Akalin et al., 2014; Brusca-Vega et al., 2014; Burden et al., 2010; Cancio et al., 2013; Casale-Giannola, 2012; Combs et al., 2010; Coots, 2007; Cramer et al., 2010; Dieterich & Smith, 2015; Gable et al., 2012; Gokdere, 2012; Gurgur & Uzunur, 2010; Kamil et al., 2015; Kessell et al., 2009; Kurth et al., 2015; Mueller et al., 2008; Russell & Bray, 2013; Shaffer & Thomas-Brown, 2015; Strieker et al., 2013; Wallace et al., 2002; Wasburn-Moses, 2005). Educational agencies able to provide a more supportive environment for inclusive education by serving the needs of teachers, both general and special education certified, and all students will be better prepared for advancing education as a whole (Akalin et al., 2014; Ginger, 2006; Zirkel, 2014). This research study specifically considers structuring professional development and/or training to support the increase in teacher knowledge of special education laws and instructional strategies in efforts to improve services provided for students with disabilities in the least restrictive environment within a school system.

## Chapter III

### Design and Methodology

#### Introduction

In the field of education, as teachers gain skills and knowledge they are able to approach the assorted requirements and ever-changing challenges of educating students with confidence and competence (Holcomb-McCoy & Bryan, 2010; Hur, 2006; Kamil et al., 2015; Lumpkin et al., 2014; Ruechakul et al., 2015). By empowering secondary education teachers with an expansion of knowledge of legal requirements in special education and the types of accommodations and adaptations assisting students with disabilities in the classroom, education services will improve for all (Combs, et al., 2010; Dieterich & Smith, 2015; Gable et al., 2012; Kamil et al., 2015; Strieker et al., 2013). For example, empowered teachers will be more capable of utilizing the tool of the IEP to advance the education received in a specific class (Ginger, 2006; Rotter, 2014; Shippen et al., 2011). Additionally, research completed by Russell and Bray (2013) and Agarwal et al., (2015) emphasize the need for increased knowledge of special education legal requirements on the part of education personnel.

Providing training on legal mandates in special education and possible accommodations and adaptations assisting in meeting these within four selected school districts (Appendices A & B) will empower secondary teachers and other staff in approaching inclusive education. Professional trainings provided by a special education expert allow teachers to ask questions and obtain answers helping acquire confidence in working with their specific teaching situations related to students with disabilities. Encouraging teachers to implement knowledge gained and practice accommodations and adaptations required by the Individual with Disabilities Education Improvement Act of 2004 (IDEA, 2004) under the guidance of district special education staff

following professional training should further the confidence of secondary teachers in serving students with disabilities in general education settings.

To provide information to administrators and educators ascertaining the type of professional training needed to support special education programs and students, the following research questions were addressed in this study:

1. How accurate is the understanding and knowledge secondary teachers have of legal requirements in educating students with disabilities in general education settings?
2. What is the extent of the relationship between professional training on special education legal requirements and the confidence secondary teachers have in serving students with disabilities in general education settings?
3. What is the extent of the relationship between knowledge obtained through professional training and secondary teachers' participation in legally required special education meetings (i.e. Individualized Education Plan, 504, MDT and RTI)?
4. What is the extent of the relationship between knowledge obtained through professional training and secondary teachers' application of the legally required accommodations for students with disabilities in the classroom?

### **Research Design**

To gather the most complete information possible and ensure high levels of rigor, a mixed methods research format was selected for this study (Brantlinger et al., 2005; Lund, 2012; Marshall & Rossman, 2016; Sagoe, 2012; Smithson, 2000; Trainor, 2011; Wyatt, 2015).

Empowering educators, both general and special education teachers, using specific professional

training to expand knowledge was the fundamental theory used as the basis for the development of the study. One method of measurement for teacher knowledge growth was administration of the Knowledge of IDEA Survey to educators prior to their participation in focused professional training, Appendix C. Additionally, this same survey was utilized after participation in the training, specifically with teacher participants in the professional training. To obtain additional in-depth information on the impact of the training on teacher implementation of acquired information within the classroom, focus groups consisting of training participants were interviewed at research sites to discuss inclusive actions taken within school settings and impact of the professional training teachers received.

As one portion of this study dealt primarily with determining specific level of teacher knowledge related to legal requirements of special education, a quantitative research method was selected as one method for obtaining this data (Field, 2013; Geoff & Williams, 2011; Kee, Osman, & Ahmad, 2013; Koksal et al., 2014; “Organizing your social sciences research paper,” 2016). Research question one was measured primarily through the quantitative Knowledge of IDEA survey, while the following three research questions were answered only in part with information gathered through the quantitative tool. Focus groups, the qualitative research method, provided supporting information for the first question and the majority of the information for answering research questions two, three and four. Professional training was offered to secondary school teachers to determine if a supported focus on knowledge attainment in special education mandates, regulations, and inclusive teaching strategies would enhance teacher participation and performance in an education setting including students with disabilities (Benedict et al., 2014; Odom et al., 2005). The researcher hypothesized secondary school teachers would more readily participate in legally mandated IEPs and other special education

meetings if they had a broader understanding of laws requiring general education teacher participation (IDEA, 2004). Secondary teachers primarily focus on an area of subject specialization in their preparation for entering the education profession (Carter et al., 2015; Casale-Giannola, 2012; Shaffer & Thomas-Brown, 2015). Thus, the researcher also hypothesized secondary teachers needed focused training on teaching strategies and techniques, enhancing adapted and accommodated teaching strategies needed for inclusive education mandated by legislation and case law (IDEA, 2004; Wright, 2016; Zirkel, 2014).

By reviewing the research questions and the hypothesis pertaining to the impact of professional training regarding special education upon secondary teachers, a quantitative survey was determined an effective measurement tool for a portion of this study (Field, 2013; Geoff & Williams, 2011; Kee et al., 2013; Koksall et al., 2014; “Organizing your social sciences research paper”, 2016). A focus in this study was determining the accuracy of the presupposition, based on preceding research studies, secondary teachers lacked knowledge in regulations and strategies related to inclusive education. Quantitative measures are used to measure accuracy through measuring responses on specific knowledge areas (Field, 2013; Geoff & Williams, 2011; Kee et al., 2013; Koksall et al., 2014; “Organizing your social sciences research paper,” 2016). This study dealt with determining teacher knowledge and resulting empowerment of teacher’s working with inclusive education as knowledge is provided through professional training. Utilizing a quantitative research format allowed for specifically focusing in analysis of the variables to determine accuracy of the hypothesis (Geoff & Williams, 2011; Kee et al., 2013; Koksall et al., 2014; “Organizing your social sciences research paper”, 2016). The Knowledge of IDEA survey developed with specified sections focusing on aspects of the federal law allowing

for specific knowledge variables to be analyzed within the quantitative data (Dretchen-Serapiglia, 2016; IDEA, 2004; Sanders, 2015).

To gather more robust and detailed information in this study about empowerment of teachers following professional training, the researcher included a qualitative aspect in the form of focus groups of participants from each of the professional training sites (“Analyzing focus group data,” 2017; Brantlinger et al., 2005; Byers & Wilcox, 1988; Golafshani, 2003; Lund, 2012; Odom et al., 2005; Yao, 2015). Including focus groups allowed the researcher to gather further details on attitudes and perspectives of teachers currently practicing in the classroom who participated in the provided professional training (“Analyzing focus group data,” 2017; Brantlinger et al., 2005; Byers & Wilcox, 1988; Lund, 2012; Odom et al., 2005; Yao, 2015). The use of protocols within the focus group allowed for efficient use of interview and discussion in order to obtain deeper understanding of educators’ responses to the professional training (“Analyzing focus group data,” 2017; Brantlinger et al., 2005; Golafshani, 2003; Lund, 2012; Odom et al., 2005; Yao, 2015). Teachers provided information about the extent of empowerment gained from specialized professional training, implementation of knowledge in the classroom and impact on beliefs and actions pertaining to inclusive education providing context to raw data. Insights from perspectives of the participants on these aspects of the effect of the professional training were especially helpful for use in future application and replication in fully answering research questions two, three and four of this research study.

### **Participants**

Secondary educators were selected as the participants of focus for the study because of their unique characterizations in training and teaching strategies. Traditionally, teachers in secondary school settings focus their own educational training in specified, specialized content

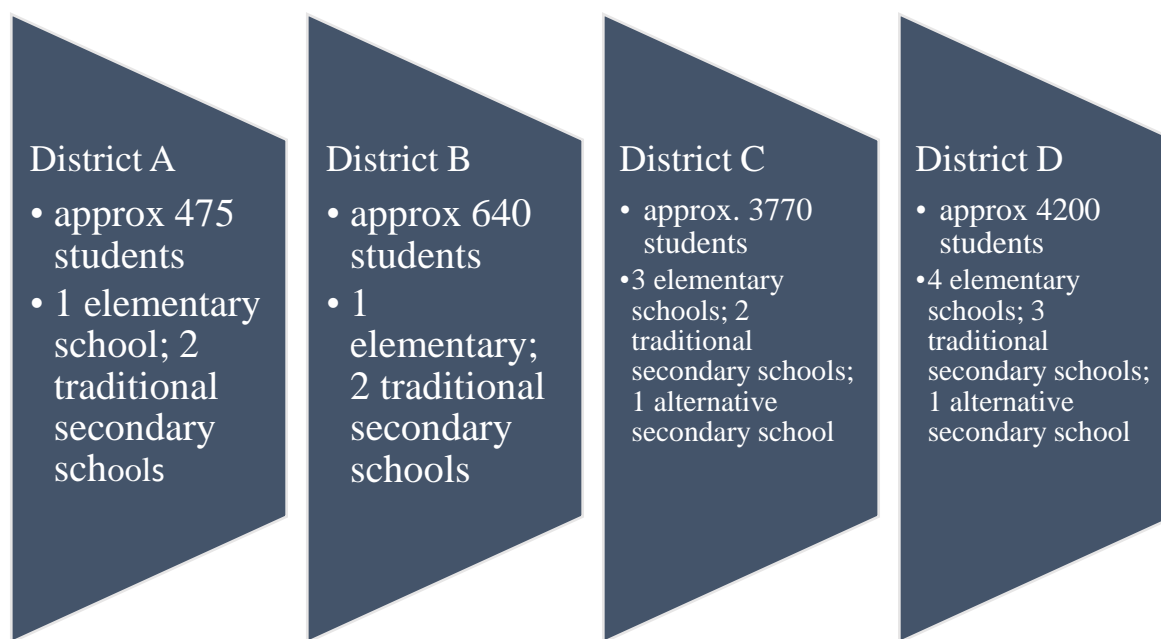
area, such as mathematics or English, while obtaining professional certification and working with students. Verification of subject area mastery through content area tests or university degrees is required to receive content teaching certifications within the state selected for research sights. Because of their narrow content focus, there is less general teaching strategy application in the professional training and experience of secondary educators, which lends itself to the decrease in general educator focus and empowerment within inclusive teaching (Carter et al., 2015; Casale-Giannola, 2012; Dieterich & Smith, 2015; Kessell et al., 2009). Thus, in formulating this study, educational professionals working solely in a secondary setting, grades 6 through 12 in the United States, were sought as participants. Other educational employees, including those with elementary education certification, within the selected districts were also invited to participate in the training. Teachers with elementary education certification employed in secondary level schools supplied comparison information within the research data allowing for a more complete explanation of impact of professional training.

Four school districts, Figure 5, in one western state in the United States were selected and recruited to be participants in this study. The districts were all large enough to have a range of secondary teachers, covering grades 6-12 in a variety of middle school, junior high school, 9<sup>th</sup> grade centers, traditional high schools, and alternative high schools. Additionally, districts contained several elementary schools and varied educational support staff, such as speech language pathologists and paraprofessionals. Superintendents and district special education directors served as contact points allowing for the professional training focused on special education law and classroom accommodations to be provided to educational staff in the first quarter of the school year. Multiple districts and schools were selected in order to validate results of this study focused on teacher empowerment related to federal regulations, case law,



and jurisdictional interpretations across school districts to account for local practice in implementation of IDEA requirements.

**Figure 5 - Participant District Demographics**



The four districts ranged in the size of the student population served from approximately 280 to 4,200, Figure 5. Secondary school structure varied amongst the districts, with the smaller districts sharing some staff between schools. The populations of the school districts selected were similar demographically, consisting of a combination of rural outlying populations with a larger population center in the district. The schools were a focus of the community in each of these districts. Students were drawn from across different geographic and socio-economic areas to the public secondary schools located in the districts. The student ethnic populations were predominantly white, with a Hispanic population ranging from 8-45%, depending on the district. Reported data indicated student population in each district classified as being provided services through special education, or having an Individualized Education Plan (IEP), was approximately

10-12%. This is comparable to reported average data in public schools across the United States (U.S. Department of Education, 2016).

Participant educators were recruited through the assistance of district superintendents, special education directors, and other administrators. A letter sent to the superintendents of the varied school districts to obtain permission to conduct the professional training and collect subsequent research data for this study within the school districts is shown in Appendix A. After receiving required permission and HRRC approval for the research study (Appendices B & F), scheduling arrangements were coordinated between the professional trainer and specific school districts to meet the needs of differing district school calendars. All participating school districts required professional contract days for their teachers. This provided an effective time for delivery of this professional training as the majority of desired educational personnel participants would be present.

The opportunity to attend a structured professional training focused on inclusive education legal requirements and teaching strategies successfully utilizing varied accommodations and adaptations for students with disabilities was provided to educational staff in participating districts. At each research location, the training was conducted by the same professional trainer with multiple years of experience in training general education teachers in special education legal requirements, characteristics and disabilities of special education students, and accommodation implementation within the general education setting. At each research site, educators were requested to complete the Knowledge of IDEA survey prior to the professional training delivery. From the four districts, a total of 169 (N=169) educators completed the survey prior to the training. Educators employed in the district were invited to attend the professional training provided in this research study with no obligation to be

participants in the data gathering. Participation in the survey and focus group aspect of the research study was voluntary. Seven teachers opted out when confirmation of participation was required in the first survey administration. Twenty-one survey participants did not complete all of the questions on the survey.

Demographic information was gathered from the participating educators, reflected in Table 2. The study included 144 general education teachers (85.2%) and 25 special education teachers (14.7%). Teaching experience for all the teachers in the study ranged from first year teachers to 38 years of experience, with a mean of 12.62 years (SD =10.39). There were 48 (28.4%) of the participants who had completed a Master's or Specialist degree, while 87 (51.4%) of the participants had received their Bachelor's degree. Thirteen (7.6%) of the participants indicated they had completed some graduate work past a Bachelor's degree, while two participants had completed a Doctorate degree. The remainder of the participants indicated either Other in the selection or opted not to complete the question related to degree level on the survey.

Certification was determined as a difference between elementary education, secondary certification, and other areas of emphasis including speech language pathologists, counselors, administrators and paraprofessionals. Special education was selected as the area of certification by 25 (14.7%) of the participants. Elementary education certified participants totaled 44 (26.0%). In secondary certification areas, participants indicated 18 (10.6%) with certification in English/Language Arts, 12 (7.1%) in Mathematics, 15 (8.8%) in Science, and 20 (11.8%) in Social Studies. Additionally, teachers indicated primary certification of 9 (5.3%) in Fine Arts, one (less than 1%) in Foreign Language, 7 (4.1%) in Health and Physical Education, and 31 (18.3%) indicated Other when selecting area of certification.

**Table 2 - Professional Training Participant Demographics**

Descriptive Characteristics	Population Totals	Population Percent %
<u>Years of Teaching</u>		
0-5 years	66	39.0%
6-10 years	25	14.7%
11-15 years	15	8.8%
15-20 years	16	9.4%
20 or more years	44	26.0%
<u>Education Level Completed</u>		
Bachelor's degree	87	51.4%
Graduate past BA/BS	13	7.6%
Master's degree	38	22.4%
Specialist degree	10	5.9%
Doctoral degree	2	1.1%
Other/No answer	19	11.2%
<u>Teacher Certification</u>		
Elementary Education	44	26.0%
Special Education	25	14.7%
English/Lang. Arts	18	10.6%
Mathematics	12	7.1%
Science	15	8.8%
Social Studies	20	11.8%
Foreign Language	1	>1%
Health & Physical Ed.	7	4.1%
Fine Arts	9	5.3%
Other	31	18.3%

*Note:* All % rounded to the nearest whole number. Participants indicating multiple areas of certification were included in all; therefore, the sum of the percent does not equal 100.

The researcher surmised prior training in special education laws and accommodations would impact educator perspective related to inclusive teaching. Data was obtained related to this supposition in the survey administered prior to the professional training. Participants were asked the number of special educational courses completed in the five years prior to this special education training. Also, information on the amount of professional development or training they had participated in related to accommodations and special education regulations in the five years prior to this current, specific research study was obtained in the survey demographic questions. Participants indicated limited university course work focusing on special education,

with more participants experiencing professional development or training on special education in the five years prior to this specific research study. Results are shown in Table 3.

**Table 3 - Prior Experience in University Study or Professional Development/Training**

<b>University Courses on Special Education</b>	<b>Participant Number</b>	<b>Professional Development/Training on Special Education</b>	<b>Participant Number</b>
0 (Zero)	114	0 (Zero)	55
1 (One)	22	1 (One)	42
2 (Two)	9	2 (Two)	15
3 (Three)	8	3 (Three)	15
4 (Four)	3	4 (Four)	5
5 (Five) or More	13	5 (Five) or More	37

### **Data Collection**

Data collection for this study focused on results from two surveys of teacher knowledge and focus group discussions gathering information on teacher practice in the areas of special education legalities and inclusive teaching methodology. The first survey was administered prior to the training to all possible participants. Only teachers who participated in the professional training were part of the second quantitative survey administration. Demographic information illustrated in Table 2 was gathered from the teacher participants in both surveys regarding teaching experience, level of formal education completed, and teaching certification. Collecting demographic information helped with framing of the data analyses. During data analysis, the demographic information also helped determine if any of the outliers within the data could be explained through teacher characteristic information.

The Knowledge of IDEA survey and scale was developed by Dr. Pamela Sanders (2015) as a tool to assess teachers' knowledge of the Individual with Disabilities Education Act (IDEA) and teachers' attitudes towards inclusion policies and practices. Sanders (2015) consulted with professionals in the fields of special education and survey design to create the Knowledge of

IDEA scale and piloted the study to validate the measures. Further, this survey instrument was used in a New Jersey research study testing both general and special education teachers' knowledge of major federal regulations governing teaching of students with disabilities (Dretchen-Serapiglia, 2016). Permission was obtained from the developer of the instrument for use in this research study (Appendix D).

Since the impact of the professional training on teacher knowledge and application in the classroom of inclusive education was the key variable being considered, the researcher determined the survey tool would be administered in a short time period prior to the professional training opportunity. The survey would again be administered to the teacher participants in the week following the professional training. Questions related to the impact of the professional training on teacher knowledge and action related to inclusive education would be asked specifically in focus group discussions held approximately two months after the training. This allowed for a measurement of both short-term and long-term impact of the professional training on educators. The beginning of school year 2017-2018 was determined to be the optimal time to provide the professional training to the participating educators in order to obtain maximum teacher participation and provide training at a time when teachers were planning and implementing practices for the coming school year. A professor from a university with experience in training general and special education teachers on legal requirements, policy updates, and inclusive teaching strategies, as well as working daily in a specialized inclusive program, served as the professional trainer in this research study.

Working through district administrative contact, the researcher provided an electronic link for the survey instrument to the districts. Qualtrics was utilized as the system for distribution and data gathering of the survey instrument. Teachers received electronic

notification through a school district distribution prior to the training explaining the training and including the survey link. Participants opting for the survey link were immediately taken to a screen explaining research structure and focus, purpose of study, inviting voluntary participation, and allowing participants to accept or decline participation (Appendix E). Teachers were informed and allowed to opt out of participating in the study without any negative consequences. Educators opting out of survey participation were still invited to attend the professional training. The survey instrument was provided to participants following the electronic notification allowing for opting in to research participation. Electronic delivery through Qualtrics allowed for survey results to be gathered anonymously. Participants could opt out of answering any question with which they felt uncomfortable. This same method of electronic survey data, allowing for voluntary participation and anonymous data collection, was used for the delivery of the survey to training participants.

The qualitative element of the research study, focus group discussions, allowed further details to be added to the data collection. Focus group open-ended discussions obtained teacher's personal perspectives and explanation of learning received from the training to the data. The added depth from the focus group discussions assisted in interpretation of the data creating a more complete picture of the true value and impact of the professional training (Brantlinger et al., 2005; Golafshani, 2003; Lund, 2012; Odom et al., 2005; Sagoe, 2012; Smithson, 2000; Trainor, 2011; Wyatt, 2015). Teacher discussion provided insights for improving the professional training in future similar research.

The impact of the special education professional training on the knowledge and practices of secondary teachers was the focus of this research. Two different survey collections were used for gathering the needed data on teacher knowledge related to inclusive education. The first time

the survey was administered to the teachers was prior to the time of the training. Through an electronic medium, delivery via participating school administration, the topic of the study was introduced. Teachers were requested to complete the survey before attending the training, marking the included consent form. This allowed for the first set of data to be gathered prior to the professional training, providing a baseline measurement of teacher knowledge related to legal regulations pertaining to special education. It also provided an opportunity to stimulate interest in the topics being presented. During the professional training, attention was given to the value of the training and the learning opportunity at the time of the introduction of the trainer. The trainer also stressed the value of special education and inclusion by all educational staff at each of the training sites (Appendix G).

Knowledge of IDEA amongst the professional training participants was gathered in the survey administration delivered after the training (Field, 2013; Geoff & Williams, 2011). Approximately, one to two weeks after the training the Knowledge of IDEA survey was administered to the participants from the professional training. Survey administration and focus group participation was arranged through participating district administrative personnel. Consent was obtained through the participants opting in to completing the survey in both survey administrations. The researcher sent the survey tool link to the appropriate district contact and then the contact person for each district facilitated the delivery to the participants from the training. Open-ended questions allowing participants to provide input on the information from the training they found most insightful and which areas stymied interest for additional training. These open-ended questions were piloted with educators in districts not participating in the research study to ensure questions were structured to meet the focus of this research study.



The electronic delivery design for survey administration allowed for efficient gathering of consents and data. Allowing teachers to submit surveys in an online format within a week time frame provided more convenience to participants as they could do it as their time allowed. Electronic delivery of the survey allowed for consent to be obtained in both surveys and facilitated data result tabulating both on an individual and a whole group level. The time frame of a limited time frame in delivery for survey applications was selected to gather optimal results from participant participation as they had the professional training in district to focus participation. It also allowed for the survey information to focus teacher learning and measure knowledge attainment related to IDEA principles.

Approximately two months after the completion of the professional training and surveys, at each training research sight a focus group was held allowing teacher participation in discussion based on protocols established by the researcher. The intent of the focus groups was to obtain a deeper understanding of the personal impact of the professional training (Brantlinger et al., 2005; Lund, 2012; Odom et al., 2005; Sagoe, 2012; Smithson, 2000; Trainor, 2011; Wyatt, 2015). Data on beliefs pertaining to inclusive education and teacher confidence in working with students with disabilities was gathered in the focus group discussions (Sagoe, 2012; Smithson, 2000; Trainor, 2011; Wyatt, 2015). Measurement of data on knowledge and confidence in working with inclusive education determined the impact of the professional training on teacher empowerment in special education practices. Educators did have time for discussing and processing the information from the training with colleagues and district personnel.

Teachers were asked to voluntarily participate in the focus group to assist in providing more in-depth information on how effective the training was in regard to improving actions within the classroom on behalf of students with disabilities, participating fully in special

education meetings, and helping educators feel more empowered towards inclusive education. Additionally, IEP meetings are held annually, so time had to be provided to allow for teachers to have opportunity to attend these meetings, as well as other typical special education related meetings, in determining an impact on teacher participation based on the knowledge acquired from the professional training (IDEA, 2004). Questions used as framework for the focus group discussions also allowed for the educators to explain how or if the training had strengthened their confidence level and ability to work within an inclusive classroom setting (Appendix I). Focus groups meetings were conducted in person at all five training sites by the researcher. Written consent was obtained from each participant in the focus group. Pseudonyms were assigned by the researcher in transcribing and reporting to ensure participant anonymity (Appendix H). Focus groups met for approximately 60 minutes each time, discussing varied topics related to inclusive education and the impact of the professional training.

The empowerment theory developed by Paulo Freire, a Brazilian educator, was the base of the design for this research study. Empowerment theories proffer individuals who confidently used knowledge feel empowered to share information with others (Hipolito-Delgado & Lee, 2007; Hur, 2006; Perkins & Zimmerman, 1995). Theoretically, allowing teachers' time to apply the knowledge learned at the professional training in their own classrooms will allow them to feel empowered. Furthermore, gaining empowerment in using inclusive teaching strategies, accommodations and adaptations, and special education laws and regulations should serve to increase sharing among colleagues increasing positive results. Allowing time for the building of teacher empowerment with inclusive education as a result of knowledge obtained from the training also contributed to the timeframe for the qualitative data collection in this study.

## **Analytical Methods**

This research study was designed to use both quantitative and qualitative methods (Brantlinger et al., 2005; Field, 2013; Geoff & Williams, 2011; Kee et al., 2013; Lund, 2012; Odom et al., 2005; “Organizing your social sciences research paper”, 2016). Using a mixed methodology, incorporating both quantitative and qualitative data, allows the researcher to gather more information from participants and make the study itself more robust and rigorous (Golafshani, 2003; Lund, 2012; Marshall & Rossman, 2016; Odom et al., 2005; Sagoe, 2012; Smithson, 2000; Trainor, 2011; Wyatt, 2015). The quantitative survey allows for a broad range of participants to provide information which can be statistically analyzed for knowledge level and possible growth from the special education training. Focus group discussions, the qualitative method in this study, allows the researcher to add depth of understanding and detail to the reasons for the results of the study in relation to growth in teacher knowledge and empowerment (Sagoe, 2012; Trainor, 2011). Mixed methodology allows for varied research methods to work in combination to create a rigorous study advancing understanding of the focus topic within the education profession (Brantlinger et al., 2005; Lund, 2012; Marshall & Rossman, 2016; Odom et al., 2005; Sagoe, 2012; Smithson, 2000; Trainor, 2011; Wyatt, 2015).

In this study, the quantitative portion was designed to collect data on teacher knowledge and application pertaining to IDEA and inclusive education. Providing two survey gatherings related to the professional training facilitated statistical analysis of teacher knowledge and the impact of the training. The instrument selected to gather data was a Likert-scale questionnaire developed by Sanders (2015) to measure teacher attitudes and knowledge of inclusion and IDEA (Allen & Seaman, 2007). Sanders (2015) designed the survey to also include a measurement on accuracy of knowledge. Basic demographic information to allow for

categorization of the data in running comparative tests was requested from participants at beginning of instrument. Secondary school teachers' attitudes pertaining to and knowledge of special education laws, implementation of laws, and inclusive teaching strategies were the dependent variable being measured through the survey allowing for ordinal data to be gathered (Field, 2013; Geoff & Williams, 2011). A measurement of the knowledge level in varied participant groups and comparison of scores to the score levels through statistical tests measuring norms were obtained in the quantitative research data (Field, 2013; Geoff & Williams, 2011).

Implementing the qualitative aspect of this research obtaining further detailed information and lived experiences incorporated focus group discussions organized with protocols developed by the researcher (Appendices H & I) focusing on the research topic as guides ("Analyzing focus group data," 2017; Brantlinger et al., 2004; Byers & Wilcox, 1988; Lund, 2012; Odom et al., 2005; Yao, 2015). Willing participants from the training were gathered as participants in a small focus group at each site where the professional trainings were held, with the discussion being monitored and guided by the researcher ("Analyzing focus group data," 2017; Byers & Wilcox, 1988; Yao, 2015). The researcher guided the open-discussion in efforts to maintain the focus on the professional training, responses and application to inclusive education ("Analyzing focus group data," 2017; Byers & Wilcox, 1988; Yao, 2015). Focus group discussions were first electronically recorded by the researcher who then created a written transcript ("Analyzing focus group data," 2017; Byers & Wilcox, 1988; Yao, 2015). Coding by theme of each written transcript was done by the researcher enabling further statistical analysis of commonalities ("Analyzing focus group data," 2017; Byers & Wilcox, 1988; Yao, 2015).

Transcripts of the discussion were first coded and then themes were developed from the dominant codes (“Analyzing focus group data,” 2017; Byers & Wilcox, 1988; Yao, 2015).

Occurring prior to the professional training, the first piece of data collection created the base for analysis of educator knowledge of IDEA (Sanders, 2015). This information was analyzed by calculating the overall results of the survey using simple mean and standard deviation. Analyzing the results and aligning these results with predictions made per reviewed research studies on teacher knowledge of inclusive education helped the researcher gain an overall picture of the information on educator knowledge level (Dretchen-Serapiglia, 2016; Sanders, 2015). All data responses from the study were tabulated and graphed according to mean, standard deviation, and percentage. Demographic groupings based on previous teacher training and certification were also used for comparative data analysis.

Additionally, an initial overall scoring on the IDEA questions were tabulated using a score value demonstrating 75% accuracy on the assessment, per the scoring recommendations of the developer of the survey (Field, 2013; Geoff & Williams, 2011; Sanders, 2015). The developer of the survey supplied a scoring guide to the researcher used for accurate tabulation of the survey results (Appendix D). A t-test was used to determine whether there were statistically significant differences between knowledge composite scores and the test value. A t-test was selected for this initial work with the data results as it can show the statistical significance in independent samples (Field, 2013; Geoff & Williams, 2011). Histograms illustrating skewness of the total results reflected normal distribution. Mean scores were also tabulated for the six principles of IDEA the survey measured (Sanders, 2015).

After the teacher participants attended the professional training and the allotted time selected passed, the survey instrument was administered to training participants. This survey

data was analyzed using means, standard deviations, and suggested accuracy norms (Field, 2013; Geoff & Williams, 2011; Sanders, 2015). Frequencies of participant selection by question topic were also reviewed (Field, 2013; Geoff & Williams, 2011). This was primarily for the researchers' understanding of the data and for the overall analysis of impact within professional training participants.

After completing data analysis pertaining to knowledge related to special education legal regulations, the researcher conducted narrow group analysis as determined by the demographic data. The researcher considered whether there were significant differences in the growth rates between general education and special education teachers. Additionally, the researcher looked at the specific groups by type of teacher certification to determine impact of teacher training in elementary or secondary areas. Group differences were tested using mean and standard deviation comparisons (Field, 2013; Geoff & Williams, 2011; Kee et al., 2013; "Organizing your social sciences research paper", 2016). Other demographic groups were reviewed for significance, but none were found in this research data.

To gain further insight into the empowerment possible in the professional training, focus groups were held at each of the school training sites ("Analyzing focus group data," 2017; Byers & Wilcox, 1988; Yao, 2015). Using accepted protocols in conducting focus groups, information was gained through guided questions ("Analyzing focus group data," 2017; Byers & Wilcox, 1988; Yao, 2015). The discussions were electronically recorded, and information gathered was then transcribed. The researcher developed coding categories allowing for organization of the responses to facilitate analyzing common themes across sites ("Analyzing focus group data," 2017; Byers & Wilcox, 1988; Yao, 2015). The teacher narrative answers were useful in providing insight into their level of empowerment and confidence in working with students with

disabilities within the inclusive classroom. Information obtained in the focus group discussions provided depth of understanding into the effectiveness of this professional training in improving education opportunities for students with disabilities by expanding teacher knowledge and empowerment (“Analyzing focus group data,” 2017; Byers & Wilcox, 1988; Carter et al., 2015; Dretchen-Serapiglia, 2016; Sanders, 2015; Yao, 2015).

### **Limitations**

This research study considered varied data within focus on improving education services provided to students with disabilities in secondary schools’ general education classrooms by increasing knowledge of special education legal regulations and empowering secondary teachers in their work with students (Carter et al., 2015; Dretchen-Serapiglia, 2016; Sanders, 2015; Zirkel, 2014). A range of limitations in this study would be worth consideration or further study. Time constraints were the first limitation on this study, as the research had to be completed between August and December 2017. The researcher was constrained to working within these time parameters in order to have time to analyze the results and report to the dissertation review committee. The five month time frame, combined with the structure of the school year, caused the study to be limited to a focus on short-term impact of a focused special education professional training.

The professional training had to be offered near the beginning of the school year and the impact of the training was surveyed within a short time enabling completion of the study. Being able to determine the impact of professional training on teacher empowerment throughout a school year or within multiple scenarios was not possible due to the limited time parameters of the study. Depending on the school sites to select the date of when the training could be offered also limited the time parameters of the study. To gain a true understanding of the extent of

empowerment gained through professional training focusing on legal requirements of special education and instruction strategies of inclusive education on the secondary school educator, further studies will need to consider gathering data during a lengthier time frame, reinforcement of concepts throughout a school year or possible repeated trainings with differing key emphasis (Benedict et al., 2014; Bradshaw, 2015; Sargent et al., 2009).

Individualized education plan (IEP) meetings are legally required to be held annually for each student (IDEA, 2004). However, these meetings are held at different times throughout a school year (Etscheidt, 2007; IDEA, 2004; Ryndak et al., 2014). One aspect of the research study focused on general education teacher empowerment in participation in the IEP meeting process (Etscheidt, 2007; IDEA, 2004; Kowalski et al., 2006; Ryndak et al., 2014; Samuels, 2015). However, since there were a limited number of IEP meetings held from the time of the professional training and the final data collection, the teachers were limited in their opportunities to apply confidence in their knowledge from the training (Etscheidt, 2007; IDEA, 2004; Kowalski et al., 2006; Menlove et al., 2001; Murray et al., 2013). A limitation on the validity of the results may have decreased if teachers had the opportunity to practice the knowledge they obtained from the training by participating in more IEP meetings (Etscheidt, 2007; IDEA, 2004; Kowalski et al., 2006; Menlove et al., 2001; Murray et al., 2013).

Additionally, school districts have some leeway in the structure of the IEP meetings while meeting federal requirements (Etscheidt, 2007; IDEA, 2004; Kowalski et al., 2006; Menlove et al., 2001; Murray et al., 2013). The variance of IEP meeting structure within districts impacted the discussion in the focus groups, serving as a limitation on the details of this research study.

In addition to the IEP meetings required under IDEA regulations, school districts may conduct other types of meetings pertaining to inclusive education. For example, multi-tiered



support strategies (MTSS) and response-to-intervention (RTI) meetings are becoming accepted forms of identifying and addressing the varied needs of students (Armendariz & Jung, 2016; Daves & Walker, 2012; Hebbeler & Spiker, 2016; Patrikakou, Ockerman, & Hollenbeck, 2016; Sink, 2016; Smith et al., 2016). Depending on the focus and structure in a district, these types of meetings may not have been available for teachers to participate in during the time of the study. There was a limitation in opportunity for participants to utilize the knowledge obtained through the professional training.

The professional training was presented by a trained presenter who had experience presenting legal requirements and instruction strategies for inclusive education to general educators (Benedict et al., 2014; Wright, 2016; Zirkel, 2014). An experienced presenter, she had a great depth of knowledge and was well-prepared for each of the trainings. However, the interest and attentiveness the different educators gave to the presentation varied. Though the presenter followed the same training agenda with activities and examples at each of the site locations (Appendix G), some variation occurred due to the physical setting, date and time of training, as well as the interaction and questions from participating educational staff. Teacher attentiveness in their participation in the professional training also impacted the effectiveness of the professional training. Thus, a limitation of this research study is variance existed due to adjustments and differences in the professional training experiences.

Research data from secondary teachers in four different school districts was obtained, but the study was still limited in geographic scope. The availability of the professional trainer was constrained by travel and time considerations. Variance of the participants between the study locations was slight. Geographic limitation in the four school districts selected meant undergraduate training of teachers was drawn from same general pool of university settings, as

well as with similar teacher backgrounds and ideologies. Repeating a similar study in a significantly different geographic location may yield different results if the undergraduate training of teacher participants in education systems was obtained from universities with varying philosophies within their teaching programs. A repeat study in a different location may garner results from teachers with contrasting ideologies and backgrounds allowing further depth of understanding.

A limitation of this research study was in determining true causality of the professional training to teacher's increased knowledge and practice of inclusive strategies (Field, 2013; Kee et al., 2013; Geoff & Williams, 2011). Surveys and focus groups were given to the study participants in a timely manner in an attempt to limit the influence of outside factors on the study's results (Field, 2013; Kee et al., 2013; Geoff & Williams, 2011). The teacher participant population, however, cannot be placed in isolation. Differing factors may impact teacher attitude and knowledge dramatically. If the training empowers individual teachers reaching out and expanding knowledge about inclusive teaching for all, the impact of a colleague's influence may be a more direct factor than the training on expanding inclusive practices (Holcomb-McCoy & Bryan, 2010; Hur, 2006). Working with students with disabilities currently in their classes may also have motivated individual teachers to seek more information within the research study time frame, impacting growth in teacher knowledge and beliefs on inclusive education irrespective of the professional training.

Additionally, working with four different school districts allowed for a variety of district support and resources to influence the views of the educator participants. District interpretation and implementation of special education regulations impacted teacher understanding of specific special education aspects, such as the practices within IEP implementation. Emphasis on

inclusive education practices within school districts vary in strength, impacting the results related to teacher empowerment. This variance in school district philosophy and practice towards inclusive education is a limitation in this research study.

A final limitation to this study was by intent the individual identifiers assigned to the participants were limited. Broad demographic information was gathered. This allowed for broad comparisons in growth by groups such as experienced versus new teachers. This protected the anonymity of the test population but did limit the study (Field, 2013; Kee et al., 2013; Geoff & Williams, 2011). Focus groups were gathered with no consideration of matching to the survey results. This limited the depth of explanation able to be sought in the discussions with training participants connected to specific groups results. A study of a more defined population by results could provide a more detailed picture of the results of empowerment through professional training of secondary teachers.

## **Chapter IV**

### **Results**

#### **Introduction**

Since enactment of the Education for All Handicapped Children Act (EHA) in 1975, inclusive education for students with disabilities has expanded as a result of changes in legislation and rulings in varied court cases (Spaulding & Pratt, 2015; “The history of special education,” 2015; Wright, 2016). Education for students with disabilities is regulated currently by the Individuals with Disabilities Education Act of 2004 (IDEA) and standards set by the Supreme Court and other judicial rulings in court cases challenging different aspects and interpretation of the law by different government agencies (Holinka, 2018; Samuels, 2015; U.S. Department of Education, 2000; Wright, 2016; Zirkel, 2014; Zirkel & Hetrick, 2017). General education and special education teachers and staff working with students with special needs are responsible for meeting the legal requirements and the demands of providing quality education in varied subject areas (Cramer et al., 2010; Eskay et al., 2012; U.S. Department of Education, 2000; Weatherly, 2018; Zirkel & Hetrick, 2017).

Empowering educators through focused professional training on legal requirements and accommodations to serve students with varied disabilities is a method for improving inclusive education services for both educators and students (Akalin et al., 2014; Olson et al., 2016; Rice & Carter, 2015; Zirkel & Hetrick, 2017). The purpose of this research study was to determine the impact of a focused professional training addressing inclusive education legalities and teaching methods on secondary educators in four school districts. Data was gathered to assist in ascertaining the impact of training on empowerment related to inclusive education for secondary

school teachers, including general and special education certified, and address the following research questions:

1. How accurate is the understanding and knowledge secondary teachers have of the legal requirements in educating students with disabilities in the general education setting?
2. What is the extent of the relationship between professional training on special education legal requirements and the confidence secondary teachers have in serving students with disabilities in the general education setting?
3. What is the extent of the relationship between knowledge obtained through professional training and secondary teachers' participation in legally required special education meetings (i.e. Individualized Education Plan, 504, MDT and RTI)?
4. What is the extent of the relationship between knowledge obtained through professional training and secondary teachers' application of the legally required accommodations for students with disabilities in the classroom?

A mixed method approach bringing rigor and depth to the research was selected for this study (Anderson, 2011; Brantlinger et al., 2004; Lund, 2012; Odom et al., 2005; Sagoe, 2012; Smithson, 2000; Trainor, 2011; Wyatt, 2015). Experts in the field emphasize the combination of quantitative and qualitative methods expand the information and understanding available from research studies (Anderson, 2011; Brantlinger et al., 2004; Lund, 2012; Odom et al., 2004; Sagoe, 2012; Smithson, 2000; Trainor, 2011; Wyatt, 2015). To obtain the complete information presented in a mixed method study, this research utilized both a previously validated and vetted survey and focus group discussions (Sanders, 2015). The data obtained through both quantitative

and qualitative methods was reviewed separately and in combination as recommended by experts to effectively use mixed methodology studies (“Analyzing focus group data,” 2017; Anderson, 2011; Byers & Wilcox, 1988; Golafshani, 2003; Lund, 2012; Odom et al., 2005; Yao, 2015).

The quantitative research tool for this research study was a Likert-scaled survey administered to teachers in participating school sites prior to participation in a training focused on laws and accommodations related to inclusive education. This survey was administered to voluntary participants again after attendance in the professional training, a focus of the research study. To gain depth of understanding acquired through mixed methodology studies, focus group discussions were selected to provide qualitative information for the research (“Analyzing focus group data,” 2017; Anderson, 2011; Brantlinger et al., 2005; Byers & Wilcox, 1988; Lund, 2012; Odom et al., 2005; Yao, 2015). Focus groups were gathered at each training site to gain deeper insights and perceptions from practicing educators who participated in the professional training on special education laws and accommodations. Focus groups discussed similar questions related to the training and inclusive education. Guiding questions were drawn from the qualitative section of the Knowledge of IDEA survey (Appendix I). Participants exhibited a range of certification and expertise, pathway to teaching certification, and years of experience. At each site, at least one participant in the focus group was a certified special education teacher. The researcher both facilitated and audio recorded the focus groups to maintain accuracy in reporting (“Analyzing focus group data,” 2017; Anderson, 2011; Brantlinger et al., 2005; Byers & Wilcox, 1988; Lund, 2012; Odom et al., 2005; Yao, 2015). Recordings were then transcribed, reviewed, and coded to determine dominant themes (“Analyzing focus group data,” 2017; Anderson, 2011; Brantlinger et al., 2005; Byers & Wilcox, 1988; Lund, 2012; Odom et al., 2005; Yao, 2015).

The professional training designed for this research was conducted at the four school districts arranged and approved for this study. One district requested the training be held twice, bringing the total to five professional training sites. Estimates of participation in the training were made by the professional trainer and administrative personnel who relayed information about each site and participation in training to the researcher. All educational staff were invited to participate in the training via administration, either building principals or district special education directors. Accommodations and calendaring for the training and level of encouragement and preparation for attending the training was dependent upon the administration at each site. Prior to the training, participating educational staff were sent an electronic invitation to participate in the Knowledge of IDEA survey. This invitation sent by the in-district site contact contained a link to the survey (Appendix C). A participant selecting the link was then taken to a notification and information page, where opt-in permission for participation in the survey was obtained (Appendix E).

After the training, a shortened version of the Knowledge of IDEA survey with an invitation to participate was sent via in-district distribution to participants in the training, and participants selecting the link were again taken to a notification and information page to obtain opt-in permissions for participation (Appendix E). The survey was shortened by removing select demographic information questions. The participant rated questions about teacher attitudes towards inclusion and own perception of knowledge of IDEA were replaced with qualitative questions related to the professional training specifically. The specific 24-item Knowledge of IDEA survey remained identical.

Rates of participation by education staff in training and surveys varied by site, as seen in Table 4. Totals in Table 4 reflect completion of participation. The quantitative and qualitative

research tools were used at each of the participating research sites allowing for analysis by site and in total.

**Table 4 - Research Participation by Site and Total**

<b>Site</b>	<b>Professional Training</b>	<b>Survey #1 Prior Prof. Training</b>	<b>Survey #2 Post Prof. Training</b>	<b>Focus Group Discussions</b>
	# of Participants (approx. by trainer)	# completed	# completed	# of participants
<b>A</b>	65	56	24	6
<b>B</b>	25	16	7	4
<b>C</b>	30	16	6	5
<b>D#1</b>	65	40	17	4
<b>D#2</b>	50	41	6	5
<b>Total</b>	<b>235</b>	<b>169</b>	<b>60</b>	<b>24</b>

## Results

### Research Question One

The foundation of this study is the importance of general education teachers having knowledge and confidence with inclusive education (Cramer et al., 2010; Eskay et al., 2012; Holinka, 2018; U.S. Department of Education, 2000; Weatherly, 2018; Zirkel & Hetrick, 2017). Multiple studies indicate deficiencies in teacher knowledge related to aspects of special education including knowledge of the law pertaining to special education, classroom accommodations, and inclusive education (Dretchen-Serapiglia, 2016; Sanders, 2015). Specifically, secondary teachers, with their particular focus on subject curriculum, is an area of emphasis in analysis within this study (Abbas et al., 2016; Alfaro et al., 2015; Carter et al., 2015; Cramer et al., 2010; Dieterich & Smith, 2015; Nikolaros, 2014). Obtaining specific baseline information on the knowledge general education teachers have of special education was needed in this study focused on determining a method to expand teacher knowledge of laws and



accommodations within inclusive education. Thus, the first question in this research study explores the following:

How accurate is the understanding and knowledge secondary teachers have of the legal requirements in educating students with disabilities in the general education setting?

For this research, a determination of the accuracy of the understanding and knowledge secondary education teachers have of legal requirements in educating students with disabilities in general education settings was needed. Parallel information was obtained from participant elementary and special education certified teachers to serve as counterbalance in the research data. Information gathered related to educator training through coursework in certification and professional development and training, assessment of teacher's perceptions of knowledge level, and assessment of understanding of the laws regulating special education through the Knowledge of IDEA survey. IDEA (2004) is paramount among federal regulations currently governing inclusive education. Case law and local policy, whether state or district, continue to have considerable impact on current need among teachers on knowledge in educating students with disabilities in general school settings.

Educator training through coursework in certification and professional development and training is an important factor in teacher knowledge pertaining to special education (Alfaro et al., 2015; Cramer et al., 2010; Mastropieri et al., 2006; Nikolaros, 2014; Wasburn-Moses, 2005). Participants in the research study were those educators who consented to answer the survey prior to participation in professional training on special education laws and classroom accommodations in the four participating school districts. To determine prior level of training, participants were asked to indicate in the demographic questions the number of university courses pertaining to special education each had completed in the past five years, as well as the

professional development activities/trainings regarding special education each had completed in the past five years, Table 5.

**Table 5 - Special Education Coursework and Professional Development/Training**

Educator Certification	Total Participants	Special Education Courses completed in previous 5 years			Special Education Professional Development/Training completed in previous 5 years		
		Mean	SD	Range	Mean	SD	Range
Elementary Education	44	.77	1.39	0-5+	1.18	1.52	0-5+
Special Education	25	1.68	2.09	0-5+	3.76	1.76	0-5+
Secondary Education	108	.66	1.35	0-5+	1.76	1.88	0-5+
<b>Total Participants</b>	<b>169</b>	<b>.83</b>	<b>1.51</b>	<b>0-5+</b>	<b>1.90</b>	<b>1.93</b>	<b>0-5+</b>

\*\*dual certification indicated by participants was counted in both totals, certification labeled other was accounted for by grades being taught by participant

Due in part to being able to teach in secondary grades 6 through 8, teachers certified in elementary education were included in this research study. Teacher participants indicating elementary education certification on the survey (N=44) had completed less than one university course in the past five years pertaining to special education (M=0.77, SD=1.39), with a range of 28 participants completing zero courses while 3 had completed five or more courses. Elementary certified participants (N=44) had averaged taking slightly more than one professional development or training activity related to special education in the previous five years (M=1.18, SD=1.52), with the range being 19 participants completing zero trainings and 3 completing five or more. Special education certified participants (N=25) indicated a higher average than other participants in completing special education focused courses in the previous five years (M=1.68, SD=2.09), with the range being 12 participants completing zero and 6 completing five or more courses. Participation in special education training for special education certified teachers

(N=25) averaged higher than three in the past five years ( $M=3.76$ ,  $SD=1.76$ ), with a range of zero to five or more. Sixty percent (N=15) of the special education certified teachers indicated completing five or more trainings in the previous five years.

Secondary education certified teachers (N=108) indicated an average special education course completion level of less than one ( $M=.66$ ,  $SD=1.35$ ), with a range of 79 respondents completing zero courses and 5 people completing five or more courses in the past five years. Secondary education certified participants indicated completing an average of more than one ( $M=1.76$ ,  $SD=1.88$ ) professional development activities/trainings regarding special education in the past five years. Total teacher survey results (N=169) show an average of less than one ( $M=0.83$ ,  $SD=1.51$ ) completed special education course and a higher than one ( $M=1.90$ ,  $SD=1.93$ ) completion rate for professional development/trainings related to special education in the previous five years.

In the first part of the Knowledge of IDEA survey, respondents are asked to answer a set of questions related to their perception of their own knowledge of IDEA. As designed by the developer, these responses are rated one to five depending on the strength of their response with five indicating strongly agree down to one indicating strongly disagree with the statements (Sanders, 2015). The section related to perception of individual level of knowledge and training related to the Individuals with Disabilities Education Act (IDEA) creates a knowledge perception composite score (Sanders, 2015). As seen in Table 6, participants' agreement with the statement 'I believe I have sufficient knowledge of special education policies and procedures as mandated by the Individuals with Disabilities Education Act (IDEA)' showed an average level ( $M=3.36$ ,  $SD=0.92$ ). Respondents' belief in having received adequate training on IDEA through coursework and professional development showed a slightly lower level of

agreement in responses ( $M=3.21$ ,  $SD=0.98$ ). The knowledge perception composite score for respondents in this research study was an average score ( $M=6.53$ ,  $SD 1.76$ ), with scores ranging from 2 to 10.

**Table 6 - Means, Standard Deviation, and Percentages for Knowledge Statements**

Statement	M (SD)	Strongly Agree/Agree (%)	Uncertain (%)	Strongly Disagree/Disagree (%)
I believe I have sufficient knowledge of special education policies and procedures as mandated by the Individuals with Disabilities Education Act (IDEA)	3.36 (0.92)	81 47.9%	60 35.5%	28 16.6%
Secondary Education Certified	3.36 (0.85)	48.2	36.1	15.8
Elementary Education Certified	3.11(0.81)	31.8	47.7	20.5
Special Education Certified	3.76 (1.16)	68.0	20.0	12.0
I believe I have received adequate training on IDEA through coursework and professional development activities.	3.21 (0.98)	67 39.7%	60 35.5%	42 24.9%
Secondary Education Certified	3.10 (0.93)	35.2	37.0	27.8
Elementary Education Certified	3.20 (0.87)	38.6	40.9	20.5
Special Education Certified	3.68 (1.21)	60.0	20.0	20.0

In the Knowledge of IDEA survey, Sanders (2015) designed four questions for each of the six core principles within IDEA. The six principles from IDEA included were zero reject, nondiscriminatory evaluation, program development, least restrictive environment, procedural due process, and parental participation (IDEA, 2004; Sanders, 2015). Sanders (2015) reverse coded half of the questions for each of the concepts, to further ascertain the accuracy of the participant's knowledge. "The special education knowledge component included 24 questions with 12 containing accurate information and 12 containing false information. Thus, participants had the possibility of scoring between 24 and 120 points with higher scores indicating more accurate knowledge" (Appendix D; Sanders, 2015, page 214).

To further assess educators' knowledge, a one-sample *t*-test was conducted on the knowledge composite score. A test value composite score of 90 was suggested by the survey developer as a test value for measuring knowledge as this composite score would indicate 75% accuracy (Sanders, 2015). Statistically significant results on a *t*-test indicate group performance significantly different from the established test value (Field, 2013). In this research study, the *t*-test indicates a statistically significant difference between knowledge composite scores and the test value,  $t(169) = -13.45, p < .000$  (two tailed),  $d = 1.03$ . Educators completing the Knowledge of IDEA survey prior to participation in the professional training scored significantly lower than a score of 90 indicating a lack of accurate knowledge of the special education policies and procedures asked about in this measurement tool.

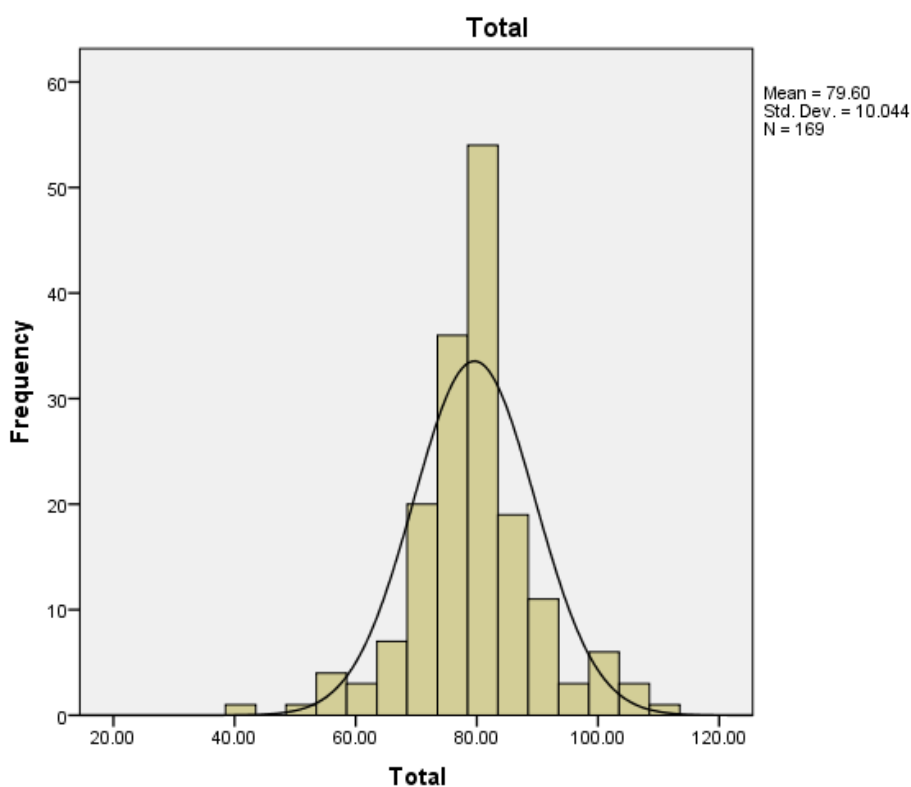
The participants' composite scores in each of the six IDEA principle areas and the overall composite score in the first survey administered to educators in this research study are displayed in Table 7. A range from 24 to 120 points, with higher scores indicating more accurate knowledge, is possible on the Knowledge of IDEA composite score (Sanders, 2015). In this study, participant results ( $N = 169$ ) ranged from 41 to 109 on the composite score for IDEA knowledge with a mean score of 79.60 ( $SD = 10.04$ ).

**Table 7 - Means and Standard Deviation for IDEA Principles and Composite**

<b>Principle</b>	<b>Mean</b>	<b>Standard Deviation</b>
Zero Reject	12.92	2.47
Nondiscriminatory Evaluation	13.39	2.94
Program Development	13.78	2.67
Least Restrictive Environment (LRE)	12.39	2.27
Procedural Due Process	14.28	2.83
Parental Participation	12.82	2.17
<b>Knowledge Composite TOTAL</b>	<b>79.60</b>	<b>10.04</b>

The composite score results for participants displayed a slightly negative skewness of -0.037, displayed in Figure 6. Educator participants scored the lowest on the questions relating to the principles of Least Restrictive Environment (LRE) ( $M=12.39$ ,  $SD=2.27$ ) and Parental Participation ( $M=12.82$ ,  $SD=2.17$ ). The highest scoring questions concerned the principle of Procedural Due Process ( $M=14.28$ ,  $SD=2.83$ ).

**Figure 6 - Histogram of Knowledge Composite TOTAL Scores**



Comparison of the knowledge composite total scores among the different teacher certifications show the highest scores earned by the teachers with special education certification, Table 8. Special education certified participants ( $N=25$ ) knowledge composite scores had a mean of 87.96 with a standard deviation of 10.17. With a mean of 78.86 the knowledge composite scores of secondary education certified teachers ( $N=108$ ) followed, and participants with elementary education certification ( $N=44$ ) had a mean score of 76.56. When the

knowledge composite scores of the teacher participants are analyzed with only the special education certified participants exempted the result is a mean score of 78.19 (SD=9.55).

Analysis of mean scores in total or by certification category are lower than score of 90 established as displaying 75% accuracy on the assessment of knowledge pertaining to IDEA (Sanders, 2015).

**Table 8 - Knowledge Composite Mean Scores by Certification**

Teacher Certification	Participation Rate (N)	Knowledge Composite Score Mean	Standard Deviation (SD)
Special Education	25	87.96	10.17
Secondary Education	108	78.86	7.96
Elementary Education	44	76.56	12.61
General Education	152	78.19	9.55

\*\*Dual certifications counted in multiple totals

The researcher considered other factors within the participant population impacting knowledge composite score variance. Level of degree, type of subject certification, and years of experience in the teaching profession were categories reviewed. Limited N, or participant availability, was a factor in consideration of this data. For example, only two, N=2, participants indicated a doctoral level degree. Additionally, subsets pertaining to years of experience in the education profession or subject area specialization produced no statistically significant differences in results on the Knowledge of IDEA survey. Thus, the researcher considered and rejected these factors due to lack of significant impact within the findings.

Focus groups were held at each of the five training sites to gather qualitative information enhancing understanding within the research study. Twenty-four total educators, all currently employed in secondary schools, participated in the discussion related to inclusive education and the professional training. All focus group participants had attended the professional training offered within the school site. Participants had been employed in the education profession on

many different levels for a range of one to 31 years, with a mean of 12. However, two of the participants listed approximate years of experience. Degree levels ranged from eight participants with Bachelor's degrees, six with Master's degrees, and eight others with some coursework in addition to the Bachelor's degree. Eighteen of the participants currently held secondary education certification. Table 9 illustrates the demographics of the focus group participants. Some participants were dual certified, reflected in the demographic listing.

**Table 9 – Focus Group Demographic Information**

Site	Participant Degree Level				Participant Certification				
	BA	MA	Grad	Other	Elem	SecEd	SPED	Alt	Admin
A	2	1	1	2		6	1	1	1
B		2	2		3	2	1		
C	2	1	2		1	5	1	1	1
D#1	1	1	2		2		1		1
D#2	3	1	1			5		2	
<b>TOTAL</b>	<b>8</b>	<b>6</b>	<b>8</b>	<b>2</b>	<b>6</b>	<b>18</b>	<b>4</b>	<b>4</b>	<b>3</b>

\*participants dual certified are indicated in both areas

Within the qualitative portion of the study, training needs emerged as the dominant theme, with codes of pre-service training and post-service training, Table 10. Within the code of preservice training, 17 of the 24 focus group participants indicated receiving little to no training in their pre-service preparation programs. Participants who indicated partaking in many classes or trainings were working in either special education or administrative positions in the participating school districts. The participants who had received more training in special education indicated in the focus group discussions a belief many educators are unable to recognize their lack of knowledge pertaining to inclusive education. Upon receiving training, educators indicated recognition of a need for more information and practice to ensure competent application and practice.



**Table 10 - Frequency Codes from Teacher Training Theme**

<b>Major Theme/Sub Theme</b>	<b>No. of Codes</b>
<b>Training Needs</b>	<b>92</b>
• Strategies	34
• Computer simulations	16
• More often	19
• Not even recognize needs	11
<b>Preservice Training</b>	<b>23</b>
• Little/No Training/Classes	17
• Many Trainings/Classes	6
<b>Professional Training – Post-service</b>	<b>64</b>
• Enjoyed. Positive impact	52

As the focus group discussions unfolded, respondents indicated the lack of knowledge related to inclusive education led to feeling overwhelmed or increased stress in teaching. Eleven of the 24 participants specifically expressed some feeling related to this when discussing different aspects of working within inclusive education. Table 11 demonstrates response codes the participants used in explaining their feelings related to classroom strategies, legal training, and working with IEPs in inclusive education.

**Table 11 - Teacher Feelings resulting from Lack of Knowledge**

<b>Teacher Feelings</b>	<b>No. of Participants/Codes</b>
• Overwhelming	3
• Not knowing where to start	1
• Weight	1
• Intimidating	1
• Little bit of a shock when step into a classroom	1
• Hard/Really hard	2
• Started kind of freaking out	1
• Stress	1

In three of the additional themes from the focus group discussions, educators desiring further knowledge emerged within the coding. Within the themes of classroom experience with inclusive education, Individual Education Plan (IEP), and legal training pertaining to special

education, teachers indicating a lack of knowledge specifically in those areas emerged in the coding, Table 12. One teacher, Abby, a six-year veteran, expressed “it’s intimidating to have to work with students with inclusion,” illustrating a dominant code from the discussions pertaining to work in education with students having disabilities. John, a special education certified teacher with experience in general education, special education, and administration, explained teacher lack of knowledge specific to IEPs this way, “If you don’t have any training in that you don’t know what the IEP is for, and so no fault of that teacher, but they really don’t understand why they are going to these meetings.” The lack of knowledge is recognized within the coding reflecting a desire for more training or knowledge in the participants expressed in the themes of training needs, classroom experience with accommodations, IEPs, and legal knowledge.

**Table 12 - Frequency Codes from Focus Group Themes**

<b>Major Theme/Sub Theme</b>	<b>No. of Codes</b>
<b>Individual Education Plan (IEP)</b>	<b>91</b>
• Lack knowledge/Need training	30
• Prof. training assist in IEP	31
• Logistics of IEP problematic	30
<b>Legal Training Special Education</b>	<b>57</b>
• Desire/Appreciate knowledge	23
• Nervousness/Fear	16
• Aware of legal aspect	18
<b>Classroom Experience</b>	<b>61</b>
• Positive for/with student	19
• Negative for/with student	9
• Function of inclusion	33
<b>Desire for More Collaboration</b>	<b>32</b>
<b>Classroom Accommodation</b>	<b>106</b>
• Teacher positive	55
• Teacher negative	51

### **Research Question Two**

As the inclusion of students with disabilities has evolved and grown, the expectations for service provided by general education teachers show parallel growth. Previous studies indicate

hesitancy by educators on the secondary level in accepting full inclusion of students with disabilities in classrooms working with advanced levels on specific subject matter (Akalin et al., 2014; Casale-Giannola, 2012; Idol, 2006; Kessell et al., 2009; Musyoka et al., 2015; Rice & Carter, 2015). Following is the second question in this research study developed to explore information on this aspect of inclusive education:

What is the extent of the relationship between professional training on special education legal requirements and the confidence secondary teachers have in serving students with disabilities in the general education setting?

Three of the major themes in the qualitative portion providing data relevant to this question are Challenges to Inclusive Education, Teachers Attitudes toward Inclusion, and Classroom Experience with Inclusion and Accommodations. As seen in Table 13, these three major themes contained codes related to serving students in the general education setting.

**Table 13 - Major Themes/Codes relating to Inclusive Classroom Settings**

<b>Major Theme/Sub Theme</b>	<b>No. of Codes</b>
<b>Challenges to Inclusive Education</b>	<b>65</b>
<ul style="list-style-type: none"> <li>• Structure of the School</li> <li>• Number of Students, Classroom Personnel</li> <li>• Time for Teacher Preparation</li> </ul>	<p>31</p> <p>27</p> <p>7</p>
<b>Teacher Attitude toward Inclusion</b>	<b>80</b>
<ul style="list-style-type: none"> <li>• Supportive</li> <li>• Hesitant/Intimidated</li> <li>• Formation of Opinion</li> </ul>	<p>44</p> <p>19</p> <p>17</p>
<b>Classroom Experience with Inclusion and Accommodations</b>	<b>199</b>
<ul style="list-style-type: none"> <li>• Positive for/with student</li> <li>• Negative for/with student</li> <li>• Function of Inclusion/Legal</li> <li>• Desire for More Collaboration</li> <li>• Teacher Positive towards Accommodations</li> <li>• Teacher Negative towards Accommodations</li> </ul>	<p>19</p> <p>9</p> <p>33</p> <p>32</p> <p>55</p> <p>51</p>

In discussing the challenges with inclusive education, teachers expressed logistical characteristics of the classroom setting making work with students with disabilities more difficult. As seen in Table 13, three separate codes depict the aspects contributing to inclusive education being challenging for teachers. The prominent codes were structure of the school, including items from budgeting to special education paperwork, increasing population of students, and amount of time with which teachers work. A third-year business teacher from site A, Carl, currently studying for his Master's degree stated,

“I have five different preps in a day that I teach, to try and figure the accommodations for students in each of those subjects as well as planning a lesson. I mean that's really tough. I would really love to do more for these students but when you can barely get figured out what you are going to do the next day . . . without staying here til midnight. So, if we could somehow end up with more time . . .”

The attitude of the teacher in the classroom has an impact on what learning opportunity occurs for the students (Bradshaw, 2015; Ginger, 2006; Idol, 2006). As teachers discussed inclusive education in the focus group, the theme of a teacher's attitude and belief toward inclusion strongly emerged. In the minor theme of Teacher Attitude toward Inclusions, over half of the coded responses indicated a supportive, accepting attitude towards students with disabilities being in the general education classroom, Table 13. First year high school teacher, Curtis, explained his view on inclusive education with these words “...(inclusion) is just as beneficial for those kids who need the help as for those kids who don't need it.” Veteran teacher Bridgett expressed recognition of the legalities surrounding inclusion by stating “...they (students with disabilities) have that right to be included.” Another veteran teacher, Alan, explained in regard to students with disabilities in the general education classroom “...it's

important that they spend some time there.” This recognition of the benefit of inclusive education was the dominant subtheme within the Teachers Attitude Towards Inclusion Theme, Table 13.

Ellen, a first-year teacher who came to the teaching profession through an alternative certification route, stated “...we are all trying our best to include our students.” She further explained the belief “...nurturing those relationships in the classroom that will become a normalcy for the kids, the teachers everyone.” Similarly, a current secondary school counselor formerly a social studies teacher, Lynne explained, “...inclusion or mainstreaming can be beneficial to everybody. Most of the time.” Though many of the codes pertaining specifically to inclusive teaching were positive, there was a percentage (33.7%) of the codes from teachers expressing hesitation with working with students with disabilities in the classroom. Phrases within the coding reflected the hesitancy teachers expressed in the focus groups related to students with disabilities being in their classrooms, Table 13.

An experienced art teacher, Liz, though supportive in general of inclusive education had this response, “I prefer that some of them have an aide (be)cause I can’t babysit when there is a class of 20.” Another experienced teacher, Abby, explained while “Inclusion is not a bad thing.... it’s intimidating to have to work with students with inclusion.” A new to teaching educator, with previous experience in supporting students with disabilities as a social worker, Curtis explained

“I really enjoyed the training that we had now that I’m teaching this year because I’ve seen both sides of the fence. Because as a PSR worker you think ‘man, this teacher should be doing more for this student,’ or I guess they need more specific help . . . now

that I'm a teacher and I have 35 students in one class with 2 or 3 on an IEP at least and it's hard. It's really hard.”

The idea professional training and development could assist teachers in working with inclusive education repeated itself in the theme Classroom Experience with Inclusion and Accommodations. Conducting accommodations and modifications in the classroom for special education students was a major theme in the qualitative data and a part of the professional training aspect of the research study, Appendix G. As seen in Table 14, the major code within the theme dealt with classroom accommodations, with the split fairly even between teachers views on accommodating in the classroom being positive or negative. Significantly though, 35 of the 55 participants' responses indicated positive views on accommodating students connected to the professional training impacting those views.

**Table 14 - Classroom Accommodations Codes**

<b>Major Theme</b>	<b>No. of Codes</b>
<b>Classroom Experience with Inclusion and Accommodations</b>	<b>199</b>
• Positive for/with student	19
• Negative for/with student	9
• Function of Inclusion/Legal	33
• Desire for More Collaboration	32
• Teacher Positive towards Accommodations***( <i>Professional Training Impact Positively</i> )	55 (35)
• Teacher Negative towards Accommodations	51

For example, Diane, a science teacher, explained “...what I got out that training was trying to present it in three different ways. You got the auditory, you got the eyes, the visual, and then you got the hands-on way.” Abby, another experienced educator, explained her response as “This training that we had just helped to emphasize that slow is better. . . . they aren't going to know it overnight. There (are) little things that you can do that make big differences that aren't reinventing the wheel. And I just felt like I had more control.”

### **Research Question Three**

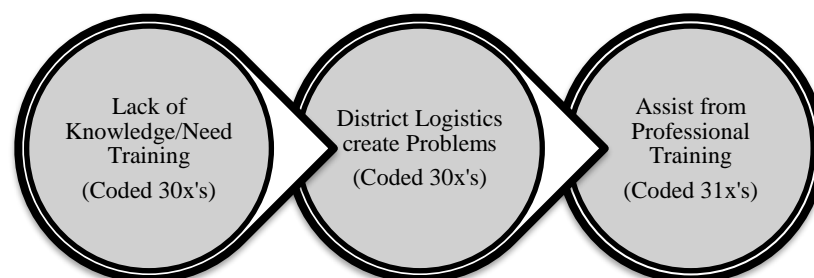
Inclusive education in the United States is governed by IDEA and a key aspect of the law is the development of an Individual Education Plan (IEP) for each qualifying student (Damer, 2004; IDEA, 2004; Olson et al., 2016; Zirkel, 2014). Major federal cases such as *Andrew v. Douglas County School District* (2017) emphasize the importance of a robust and current IEP created through the work of an educational team (Daves & Walk, 2012; Olson et al., 2016; Zirkel & Hetrick, 2017). General education teachers required to participate as part of the IEP team are expected to contribute by offering expert and professional insight into the student performance and needed accommodations in education subject areas (Etscheidt, 2007; Fish, 2008; IDEA, 2004; Kowalski et al., 2006; La Salle et al., 2013; McCord & Watts, 2010; Zirkel & Hetrick, 2017). Under IDEA regulations, school districts hold IEP meetings annually for each qualifying student (IDEA, 2004). Depending on the school district, other meetings may be held relating to providing special education services to students. Based on this important aspect of inclusive education, the following third research question was used in this research study:

What is the extent of the relationship between knowledge obtained through professional training and secondary teachers' participation in legally required special education meetings (i.e. Individualized Education Plan, 504, MDT and RTI)?

In analyzing the transcripts from focus group discussions, the Individual Education Plan (IEP) emerged as a major theme for teachers within inclusive education. Within the theme, three major codes were discussed by the participating educators (Figure 7). A lack of knowledge and a need for training related to IEPs, the problems in the logistics of how districts conduct IEPs, and how the professional training assisted teachers with IEPs emerged as equally

strong codes within the participants' discussion in the focus groups. These codes build on one another within a teacher's participation in the IEP meetings.

**Figure 7 - Teachers and Individual Education Plans (IEP)**



In the codes pertaining to educators' lack of knowledge and need for training specific to IEP participation, both special education and general education certified educators expressed teacher's lack of understanding of the purpose of the IEP and the teacher role contribute to teacher frustration with this important aspect of inclusive education, Table 15. Ellen, a language arts teacher in her second-year of teaching, stated "I had no idea what the heck an IEP was" in setting up her background with IEP use. In her third year of teaching, a secondary science teacher, Diane, explained her understanding prior to the training with "I had heard a lot about IEPs and what I kind of should do...but there are so many rules and there are so many laws and so I didn't know."

Specifically, eleven times participants indicated a lack of understanding as to why the general education teacher is participating in the IEP meeting. James, a first-year language arts secondary education teacher at site C, expressed "I go to something like this and it's like why am I here" when discussing IEP meetings. Third year business teacher Carl stated, "...sometimes I don't think teachers understand what they are doing there." He went on to explain this lack of knowledge by teachers leads to poor attendance at IEP meetings but "...by



the time it's done, it's happened, and they haven't given any valuable input." John, the special education teacher with general education and administrative experience, explained "...general education teacher will come, and they have great intent, but they don't really know why they are there." This statement parallels the consensus within the codes, Table 15.

**Table 15 - Individual Education Plan (IEP) Theme and Codes**

<b>Theme – Code</b>	<b>Code Phrases</b>	<b>No. of Responses</b>
<b>Individual Education Plan (IEP)</b> Lack Knowledge/Need Training	<i>*not understand why attending IEP</i> <i>*no training for role in IEP</i> <i>*refuse to follow guidelines</i>	<b>91</b> 30 8 10 4
Prof. Training Assist in IEP	<i>*understanding role in IEP meeting</i> <i>*preparation for IEP meeting</i> <i>*collaboration on IEP</i> <i>*confidence in working with IEP</i>	31 13 11 5 8
Logistics of IEP Problematic	<i>*uninformed of IEP/accommodations</i> <i>*only one general education teacher</i> <i>*teacher not know student</i> <i>*teacher not attend/not know legalities</i>	30 2 8 4 9

School districts supporting students with qualifying disabilities through the maintenance of IEPs are required to hold annual meetings reviewing learning goals and accommodations is with specified team members (Etscheidt, 2007; Fish, 2008; IDEA, 2004; Kowalski et al., 2006; La Salle et al., 2013; McCord & Watts, 2010). In the focus group discussions, a sub-theme emerged illustrating the logistics of the methods districts use in conducting IEP meetings have an immense impact on the success of teacher's and IEPs. Participants noted frustrations with understanding IEPs, difficulties with being uninformed a student has an IEP, or working in districts where only one general education teacher is invited to the IEP or may not have even worked with the specific student in an academic setting, Table 15.

The IDEA requirement of the attendance of general education teachers at IEP meetings is intended to utilize their expertise in designing the plan to best serve the student needs in the general education classroom (Etscheidt, 2007; Fish, 2008; IDEA, 2004; Kowalski et al., 2006; La Salle et al., 2013; McCord & Watts, 2010). Diane, the secondary science teacher, expressed a desire for more information from varied teachers to build a robust IEP, but acknowledged “It’s hard to get teachers, a single teacher to go to a meeting with a parent and all the people involved.” Bridget, a veteran high school teacher, expressed “sometimes I’m invited to come and not familiar with the student well enough to share much.” IDEA, the federal law governing IEP structure, requires the attendance of general education teachers with knowledge of the student’s academic needs (IDEA, 2004; Zirkel & Hetrick, 2017). Adam, another veteran secondary teacher at a different research site expressed the concern of having only one general education teacher present at IEP meetings may “sell him (the student) short.” This reference was made in discussion among the participants pertaining to the different challenges and behaviors a student may exhibit in various secondary classes.

Participants also discussed the impact of their participation in the professional training conducted as part of this research study regarding understanding their role in the IEP process. In the coding, participants referenced IEPs numerous times within the discussion on inclusive education and classroom accommodations of special education students, Table 15. The professional training presented as part of this research focused on the IEP and general education teacher involvement (Appendix G). Carl, the business teacher, expressed the professional training assisted him in “...seeing that bigger picture of why he’s (the special education case manager) inviting us to come to those meetings and why what we are supposed to do there helps.” James, a language arts teacher who came to the education profession through an

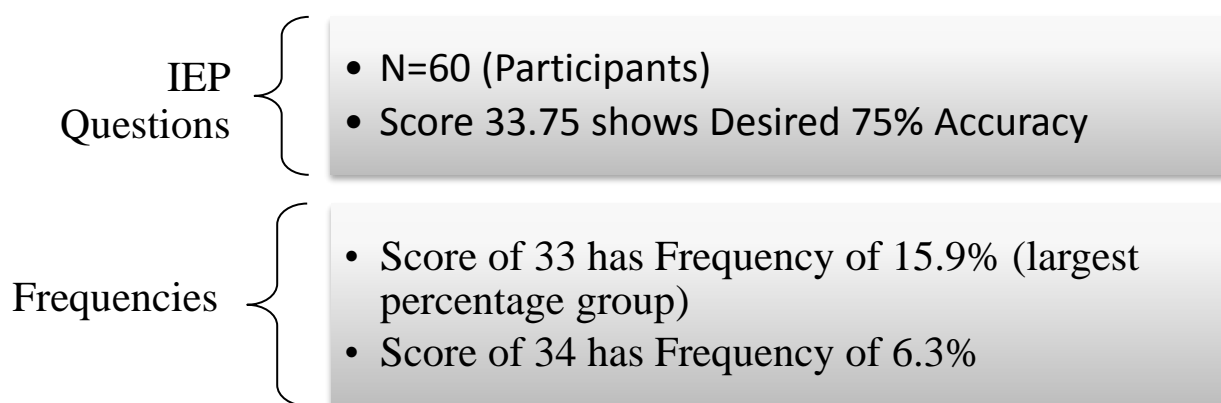
alternative certification, explained the training assisted him in knowing "...what should I be looking for leading up to that meeting, so I can come in with an informed...opinion." Another teacher who came to education through alternative certification, Ellen, expressed the training "...it (the professional training) gave me...I don't know if it's the courage or maybe just gave me the idea to ask to be included more" in reference to IEP meetings.

A veteran social studies teacher, Brent, expressed "...the points from the professional see what the special services teachers are saying and maybe what the psychologist is saying." In discussing the professional training, another experienced educator, Adam, noted the training "...gave you a better understanding so when you go in there you can say...'I know I can ask this.' I thought it was helpful. Very helpful." A first-year high school teacher, Curtis, explained "...having specific training on how to accommodate for IEPs is incredibly helpful from the teaching perspective of it." Carl, the educator working on his Master's degree, noted "... now knowing that hey if we participate in these meetings we can help maybe change those, tweak them, find one's that are more effective for that student" as his response to the delivery of information on the IEP in the professional training.

The Knowledge of IDEA survey was administered to educator participants in the professional training in the week following the training on special education legal requirements and implementing accommodations in the general education classroom. Sixty (N=60) training participants completed the survey. Nine questions from the Knowledge of the IDEA survey addressed information pertaining to the development and use of IEPs for qualifying special education students. As this was a specific aspect of the professional training, these questions and participant answers were reviewed for frequency in accuracy of the answers selected on the survey.

A participant answering all IEP specific questions accurately would have achieved a score of 45 according to the developer scoring (Sanders, 2015). To achieve the desired 75% accuracy of knowledge indicated by the developer of the Knowledge of IDEA survey, a participant would need a score of 33.75 on the responses to these questions. For the 60 (N=60) respondents of the survey after participating in the professional training, the mean score on these specified questions was 28.08 (SD=7.07). When looking at frequencies within the scores, though, the score of 33 had the largest percentage at 15.9% and 6.3% of the participants achieved a score of 34, Figure 8.

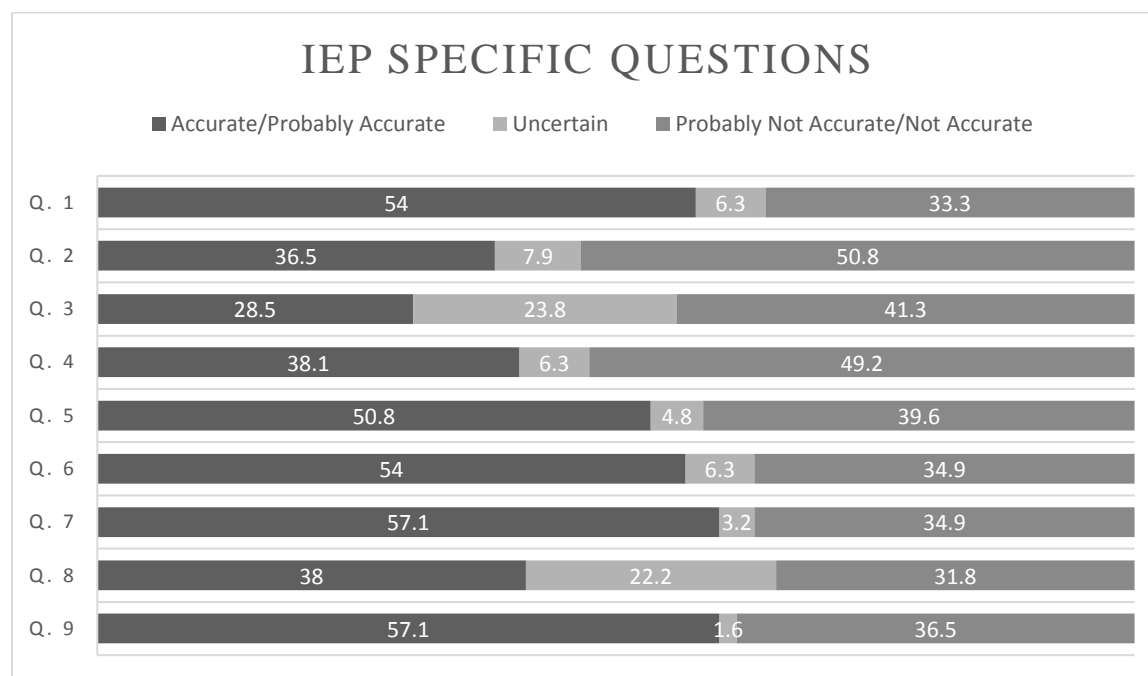
**Figure 8 – IEP Knowledge Answer Frequency**



To further assess participant knowledge related to IEPs, a one-sample t-test was conducted on the composite score for those specific questions. A test value score of 33.75 was suggested as a test value for measuring knowledge as this composite score would indicate 75% accuracy (Sanders, 2015). Statistically significant results on a t-test indicate group performance significantly different from the established test value (Field, 2013). On survey results pertaining to IEP information gathered after participation in the professional training, the one-sample *t*-test indicates a statistically significant difference between composite scores and the test value,  $t(60) = -5.38, p < .000$  (two tailed).

Exploring the frequencies of the answers within each separate IEP related question and total results expands understanding of the impact of the professional training related to understanding and involvement by educators in the IEP. Figure 9 illustrates the frequencies in the participant responses to the nine questions on IEP specific information asked in the Knowledge of IDEA survey. Information in these questions was referred to by the trainer when delivering the professional training on legal aspects of special education, Appendix G. As shown in Figure 8, the range of frequency in accurate or probably accurate participant answers on these questions was 28.5% to 57.18%, with the mean of 46.0% selecting accurate or probably accurate as the answer. The frequency of participants selecting uncertain on these questions ranged from 1.6% to 23.8%, with a mean of 9.15% for frequency in selecting uncertain as an answer.

**Figure 9 - Answer Frequency on IEP Specific Questions**



#### **Research Question Four**

As part of the evolution in public education and the inclusion of students with varied disabilities in the general education classroom, all educational staff must learn to facilitate inclusive education to best serve all students in the classroom (McLeskey et al., 2011; Nikolaros, 2014; Wasburn-Moses, 2005). More secondary teachers and specialized programs for secondary schools are developing teaching strategies accommodating for students with disabilities (Abbas et al., 2016; Dieterich & Smith, 2015; Nikolaros, 2014). Due to the growth in the need for collaboration between general education and special education teachers to accommodate students with disabilities in an inclusive classroom setting, the final research question in this study was developed as follows:

What is the extent of the relationship between knowledge obtained through professional training and secondary teachers' application of the legally required accommodations for students with disabilities in the classroom?

A major theme in the focus group discussions from educators who participated in the professional training part of the research was the Classroom Experience with Inclusion and Accommodations. From the codes in the discussions, the majority of the participants noted positive classroom experiences with students in the classroom and recognized the necessity of classroom inclusion as a requirement of legal regulations. Implementing classroom accommodations was the major code within this theme, with teachers discussing their views towards this and the impact of the professional training.

Table 16 depicts the coding related to Classroom Accommodations which emerged from focus group discussions. Coding from the participant input reflected a fairly even split between positive and negative views of implementing accommodations as part of inclusive education.

Significantly to the research study, though, within the coding on positive teacher views for classroom accommodations is the 35 out of 55 codes noting the impact of the professional training on the positive views from teacher participants.

**Table 16 - Implementing Classroom Accommodations Codes**

<b>Theme – Code</b>	<b>Code Phrases</b>	<b>No. of Responses</b>
<b>Classroom Accommodation</b>		<b>106</b>
Educator Positive (Impact of Training Positive)	<i>*training improve skills</i>	55 (35) 28
	<i>*training give confidence</i>	7
	<i>*teacher accommodate everyone</i>	14
	<i>*willing to know students and accept</i>	8
Educator Negative	<i>*Too difficult to accommodate/differentiate</i>	51 17
	<i>*Lack knowledge to implement</i>	15
	<i>*More focused on other students in class</i>	7
	<i>* Believe students do not belong in general education classroom</i>	11
	<i>*Too hard/refusal to accommodate</i>	13

Accommodations and modifications are often required in the classroom to ensure success of inclusive education (Alfaro et al., 2015; Cramer et al., 2010; Mastropieri et al., 2006; Wallace et al., 2002; Wasburn-Moses, 2005). Focus group participants expressed the leerness teachers have in working with accommodations designated legally in IEPs and other special education documents. Blanche, an experienced special education paraprofessional, explained “They (general education teachers) are having to come to the special ed[ucation] teachers to ask literally what do I do? How do I accommodate? How do I modify?” Another participant, veteran educator Lynne, described her early teaching years as “I struggled because my focus was on 95% of my classroom...And that was for me to juggle and to differentiate for everybody.” Coding revealed the hesitancy for classroom accommodations was primarily in

knowing how to implement and manage these in a regular general education classroom, along with all other expectations, Table 16.

In response to the professional training, participants explained the ideas presented increased the confidence level with which they approached implementing special education accommodations within their classrooms. Veteran teacher, Abby described her response with the following description:

“This training that we had just helped to emphasize that slow is better.... they aren’t going to know it overnight and there (are) ideas. There (are) little things that you can do that make big differences that aren’t reinventing the wheel. I just felt like I had more control. I am doing and recognizing that I do let them do every other question or something and that changes. That is something. I’m not not doing anything.”

Another veteran teacher at a different training site, Adam, explained his response to the training and accommodations with the words “I found something where I thought I can do something like this and then go in there and put it in.”

Additionally, participants noted the training prompted more discussion amongst education staff in how to work with special education students in the classroom and implement accommodations. An experienced paraprofessional, Cindy, expressed after the training she “heard teachers actually go talking and going whoa I didn’t know that...Wow that makes sense now. So, I think that trainings help.” Experienced special education teacher, John explained “I had teachers approach me afterwards and ask me questions. I think they...maybe I’m an optimist, but I think most teachers they do want to do the best they possibly can.” Within the coding, there were a significant number of references to a desire for more collaboration between



special education staff and general education teachers in efforts to improve inclusive education, specifically with accommodating needs in the general education classroom.

### **Conclusion**

A combination of quantitative and qualitative data was gathered as part of this mixed-methods research study focusing on professional training for educators regarding special education law and classroom accommodations to support inclusive education practices. The Knowledge of IDEA survey was used in the research study to gather information on teacher knowledge pertaining to special education law. This quantitative data was gathered both prior and after the professional training. Additionally, qualitative information was obtained using focus group discussions held at each of the training sites approximately two months after the professional training.

Administrators, teachers, both general and special education certified, and paraprofessionals participated in the focus groups. Participants discussed subjects related to inclusive education and specifically the professional training aspect of this research study. Focus group discussions were transcribed, coded, and themed. Major themes expanding on the research study emerged from the focus group data.

## **Chapter V**

### **Discussion**

#### **Introduction**

As society moves toward more inclusive learning for students directed by legislative mandates, case law, and social evolution, educators in schools strongly indicate a need for increased knowledge and support of the requirements to ensure success with special education inclusion (Dretchen-Serapiglia, 2016; Eskay et al., 2012; IDEA, 2004; Sanders, 2015; Wright, 2016; Zirkel, 2014). Participants in the present study were drawn from four school districts of different sizes with diverse prior emphasis on inclusive education within their schools. A mixed-method study incorporating quantitative and qualitative tools was utilized in this research on teacher empowerment with inclusive education pertaining to students with disabilities (Brantlinger et al., 2005; Lund, 2012; Marshall & Rossman, 2016; Odom et al., 2005; Sagoe, 2012; Smithson, 2000; Trainor, 2011; Wyatt, 2015). Utilizing varied tools for data gathering provided multiple points of consideration for the researcher in addressing the guiding research questions (Brantlinger et al., 2005; Lund, 2012; Marshall & Rossman, 2016; Wyatt, 2015).

Analysis of the data results connected emergent themes providing information for future research and professional practices. Following is a summary of the results gathered pertaining to each guiding question and conclusions drawn by the researcher. Using the empowerment theory as a base, the data in the research study provided further understanding of educator needs related to inclusive education.

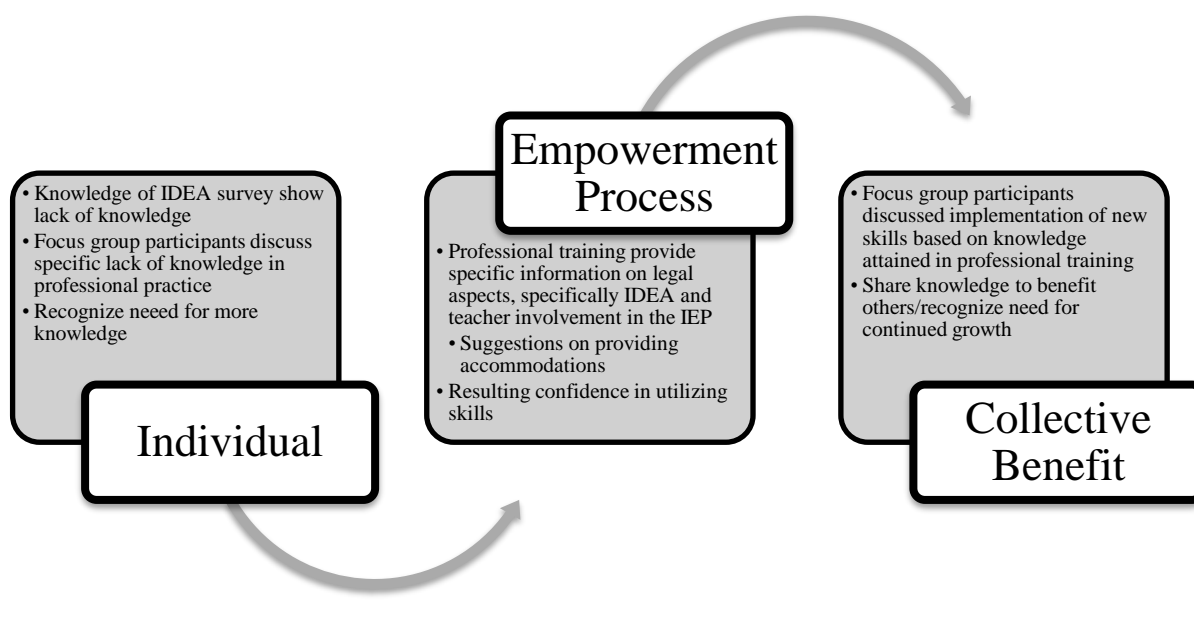
#### **Summary of the Results**

Students with disabilities receive services in public schools through inclusive education. The theory of empowerment developed in the 1960s by Paulo Freire posits attainment of

knowledge develops the ability of individuals to obtain skills necessary to improve a current challenging situation (Hipolito-Delgado & Lee, 2007; Hur, 2006; Perkins & Zimmerman, 1995). As shown in Figure 3, page 36, this research supports the theory of empowerment in training and supporting knowledge attainment within inclusive education increasing the abilities of teachers, as well as lead to desire for further skill development (Hur, 2006; Perkins & Zimmerman, 1995).

Based on the empowerment theory, this mixed-method research study determined the knowledge level and needs of general education teachers related to inclusive education. Results in this research study indicate a need for developing knowledge secondary teachers have regarding legal requirements of inclusive education. Additionally, results obtained through mixed-method tools indicate a strong relationship between professional training pertaining to special education law and accommodations and teacher confidence in working with students with disabilities in different aspects of inclusive education, Figure 10.

**Figure 10 – Empowerment Theory Application to Research Study**



**Research question one.**

Ascertaining educator knowledge level pertaining to IDEA and other legal requirements governing inclusive education established a base for the importance of this research study. Since the 1970s, through The Education for All Handicapped Children Act and Section 504 of the Rehabilitation Act students with disabilities have been included in public schools in the United States (Spaulding & Pratt, 2015; “The history of special education,” 2015; Wright, 2016; Zirkel, 2014). The Individuals with Disabilities Education Act (2004) and subsequent case law decisions have repeatedly emphasized the importance of education personnel in serving the needs of students with disabilities within inclusive settings (IDEA, 2004; Samuels, 2018; U.S. Department of Education, 2000; Wright, 2016; Zirkel, 2014). Deficiencies in knowledge related to different aspects of special education were found through both the participant surveys and focus groups discussions used as mixed-method sources in this research study.

Prior research studies established the training teachers receive through coursework or professional development is an important facet in developing teacher knowledge in working with students with disabilities (Alfaro et al., 2015; Cramer et al., 2010; Mastropieri et al., 2006; Nikolaros, 2014; Wasburn-Moses, 2005). The researcher found deficiencies in preservice and professional development training among the participants in this study. Participants (N=169) had completed less than one university course in special education (M=0.83, SD=1.51) and less than two professional development courses (M=1.90, SD=1.93) in the previous five years. Participants teaching in secondary schools, irrespective of whether certified in elementary education or specialized secondary subjects, reflected this lack of prior training in special education.

The results of the Knowledge of IDEA survey reflected a lack of knowledge on the part of the participants. In this study, the participants' (N=169) knowledge composite scores prior to the professional training had a mean score of 79.60 (SD=10.04) with a range in scores from 41 to 109. In all areas of teacher certification, the mean scores for the Knowledge of IDEA survey were lower than the score of 90 established as displaying 75% accuracy on the assessment of knowledge (Sanders, 2015). Statistically significant T-test results as measured by this survey supported a finding of educators lacking knowledge of IDEA regulations.

Participant input provided insight into teacher perception of their level of knowledge within inclusive education. In both the perception of knowledge questions asked as part of the Knowledge of IDEA survey and the focus group discussions, teacher participants indicated a lack of knowledge pertaining to working with inclusive education.

Theming and coding from the focus group discussions at the five different training sites revealed a recognized lack of knowledge of special education from the professional training participants. Educators expressed a need for further knowledge within multiple themes emerging from the qualitative data. Significantly, 17 of the 24, 70.8%, secondary education participants in the focus group discussions noted receiving little to no training in special education legalities and application in the classroom prior to entering the teaching profession. The quantitative and qualitative data gathered in this research study pertaining to the understanding and knowledge secondary teachers have of the legal requirements within inclusive education supports a conclusion there is a deficit in this area. All aspects of the mixed-method data support the finding secondary educators are lacking complete and accurate understanding and knowledge of the legal requirements of special education.

**Research question two.**

Qualitative data gathered from focus group discussions held with participants in each of the five professional training sites allow for conclusions to be drawn on the relationship between the professional training and the level of confidence teachers have in providing inclusive education services to students with disabilities. There were six major themes found in the codes from analyzing the focus group transcripts. These themes were Teacher Training for Inclusive Education, Individualized Education Plan (IEP), Legal Training in Special Education, Challenges to Inclusive Education, Teacher Attitudes toward Inclusion, and Classroom Experience with Inclusion and Accommodations. Three of these themes, Challenges to Inclusive Education, Teachers Attitudes toward Inclusion, and Classroom Experience with Inclusion and Accommodations, contributed to understanding on the second research question.

Prior research shows the beliefs and attitudes teachers hold in the classroom greatly impact the learning opportunity provided for students (Bradshaw, 2015; Ginger, 2006; Idol, 2006). Overall, coding in the focus group discussion showed teachers support inclusive education with more than half, 44 out of 80 codes, indicating acceptance of this aspect of schooling. First year teacher Curtis expressed “I think it’s just as beneficial for those kids who need the help, as for those kids who don’t need it.” Lynne, an experienced teacher recently moved into counseling, explained the importance of collaborating with a special education certified colleague this way: “She really helped me understand.... the needs of the students and how inclusion or mainstreaming can be beneficial to everybody.” Similarly, the researcher’s initial acceptance of and ability to implement accommodations developed through work with special education certified teachers in the profession.

Within the themes of Teacher Attitude toward Inclusion and Classroom Experience with Inclusion and Accommodations, though, coding reflected significant hesitation by the teachers in working with inclusive education. A range of a quarter in the first theme to half of the codes in the second theme indicated reluctance by teachers on inclusion of students with disabilities in the general education classroom. For some teachers the reluctance pertained to social acceptance of the students. As Ellen, a new teacher, expressed her concern about a student on an IEP, “She’s in my advisory, and I’m worried about how students will treat her or react to her.” Coding showed results from the participants indicating hesitancy or questioning of their ability to manage and instruct within the inclusive classroom. Experienced teacher Abby explained, “It’s intimidating to have to work with students with inclusion.” The professional trainer conducting the trainings for the research study noted participant questions revolved around seeking more information about accommodations implemented successfully by the trainer. Personal participation in professional training provided teachers an opportunity to ask for specific ideas of how to directly address student needs within the classes teachers were currently instructing.

Coding within the theme of Classroom Experience with Inclusion and Accommodation supported a conclusion there was a positive relationship between the professional training and teachers attitude toward accommodating students with disabilities in the general education classroom. Thirty-five codes specifically referenced a positive impact from the professional training on teachers’ attitude toward accommodating students in an inclusive setting. Abby, an experienced elementary certified teacher practicing at the secondary level, indicated the training reminded her “There (are) little things that you can do that make big differences that aren’t reinventing the wheel, and I just felt like I had more control.” Another experienced teacher, Adam, expressed regarding the training, “I thought I can do something like this and then go in

there and put it in.” At each research site, the professional trainer indicated participants commented on an idea from the training they were planning to implement immediately. The research data shows professional training has a strong, positive relationship on the attitudes and confidence secondary teachers have in serving students with disabilities in the general education setting.

### **Research question three.**

Conclusions reached pertaining to the relationship between knowledge obtained through professional training and secondary teachers’ participation in legally required special education meetings were formulated from both quantitative and qualitative data collected in this research study. A key principle in the federal IDEA is the formation of an Individual Education Plan (IEP) for each qualifying student with a required annual team meeting to create and review goals and accommodations (Damer, 2004; Holinka, 2018; IDEA, 2004; Olson et al., 2016; Samuels, 2018; Weatherly, 2018; Zirkel, 2014). The Individual Education Plan (IEP) emerged as a major theme in the coding from the focus groups at each professional training site, and questions specifically about the formation and use of an IEP were in the Knowledge of IDEA survey (Sanders, 2015).

Teachers’ interaction and involvement with IEPs in general education is a major theme in the qualitative aspect of this research study. Analysis of the coded responses within the Knowledge and Use of Individual Education Plan theme reveal 10 participant codes of no prior training pertaining to IEPs. Eight of the codes indicate a lack of understanding from participants in their purpose in attending IEP meetings. Representative of this, a first-year teacher Ellen explained:



“Last year was my first year ever teaching and that was one of the things I was the most stressed frustrated with.... I had no idea how to access it, no idea how to read it. I had no idea what the heck an IEP was.”

Importantly, 19.7% of the codes within the theme reveal a deficiency in general education teacher preparation for a robust role in the IEP process as expected within the IDEA regulations.

Significantly, 31 of the 91 codes in the theme, 34.0%, note the professional training assisted the participant educators in working with aspects of an IEP. As described by Curtis, the first year teacher, “...having specific training on how to accommodate for IEPs is incredibly helpful from the teaching perspective of it.” Within the minor theme of the professional training assisting teachers with an IEP varied points were noted by participants at each of the research sites. Coding revealed the professional training enhanced general education teacher understanding of their role in the IEP and in preparing for more robust participation in the IEP meeting.

In a recent legal training for administrators in education, Julie J. Weatherly, Esq., (2018) emphasized the importance of training general education teachers in the specifics of the IEP and their role in developing and implementing the plan. Participation in legal trainings, as referenced by Weatherly (2018), allows practicing educator to improve skills with implementing IEPs and advance as an inclusive educator. The in-person training focusing on legal regulations and implementation of accommodations used in this research study is shown to be a successful training tool for educators related to inclusive education. Increased confidence in supporting students with an IEP in the general education classroom was also revealed as a benefit of the professional training in the coding from the participant focus groups.

The Knowledge of IDEA survey was administered to education personnel who participated in the professional training on special education legalities and accommodations. Nine of the 24 questions addressing knowledge of IDEA principles were specific to the federal regulations on the IEP (Sanders, 2015). T-test results for the totals on the IEP related questions indicated a statistically significant gap in knowledge by the participants. However, in analyzing the frequencies of the answers selected by participants further understanding was obtained. Participants selection of uncertain, the neutral answer on the survey, ranged from 1.6% to 23.8%, with a mean of 9.15%. Significantly, participants (N=60) were confident in selecting definitive answers to the IEP questions on the survey administered after the professional training. For the nine questions, a mean of 46.0% in accurate or probably accurate as selected answers was found in the quantitative data. This is a significant percentage of participants answering correctly to the knowledge question.

Analysis of the data obtained in this research study established the professional training delivered within the school had a strong, positive impact on practicing secondary teachers' understanding and perceptions of IEPs. Carl, a teacher in his third year, explained the professional training assisted in

“...being able to see that overarching picture helped the teacher understand why you are doing it and what they can do when they are there....we do get frustrated by those accommodations and so now knowing that hey if we participate in these meetings we can help maybe change those, tweak them, find one's that are more effective for that student. You know we can affect what that piece of paper says that will actually be effective for that student.”

The IEP is the preeminent legally required special education meeting and was the focus in the professional training (Cramer et al., 2010; Samuels, 2018; U.S. Department of Education, 2005; Wright, 2016). Since IEP meetings are fundamental to special education, conclusions drawn pertaining to the relationship between participation in the professional training and secondary teacher participation in IEPs are applicable to all meetings supporting inclusive education.

**Research question four.**

A key component of successful inclusive education is teachers implementing legally established and required accommodations for a student with disabilities in the classroom (Holinka, 2018; McLeskey et al., 2011; Nikolarus, 2014; Wasburn-Moses, 2005). A student's IEP is developed to guide the required accommodations allowing for the student to learn and achieve in the least restrictive environment (LRE) (Cramer et al., 2010; Samuels, 2018; U.S. Department of Education, 2005; Wright, 2016). Data gathered in the qualitative portion of this study revealed a major theme of Classroom Experience with Inclusion and Accommodations. The codes within this theme contribute to understanding of the relationship between knowledge obtained in the professional training and secondary teachers' application of accommodations in the general education classroom.

Coding from the qualitative portion of the study revealed the positive and negative responses from educators towards accommodations were evenly balanced. Lynne explained as a teacher with full classroom focused on a specific academic subject it was "hard for me to juggle and to differentiate for everybody." This illustrates the type of coding totaling 51 negative responses from participants towards implementing accommodations in the classroom. Jenn, a veteran teacher, explained her reaction to accommodations in IEPs as "how in the world am I ever going to manage this?"

In contrast to the negative, or reluctant, responses in the coding, there were 55 participant responses coded as positive, or accepting. Significantly in the positive coding, 35 of the 55, 63.6%, codes in the minor theme of Educators Positive to Accommodations reveal the professional training contributed to the positive views. An experienced general education teacher, Abby, in talking about the professional training stated, “I felt like the ideas that she gave us were like actually real. Like, oh it’s way more manageable now that I have a couple of ideas under my belt.” Coding revealed participants believed the professional training provided information improving their skills to implement accommodations and built their confidence in working with varied accommodations.

Building confidence to implement knowledge is a specific aspect of the empowerment theory base of this research study (Holcomb-McCoy & Bryan, 2010; Hur, 2006; Kamil et al., 2015; Perkins & Zimmerman, 1995; Ruechakul et al., 2015). The professional trainer included computer-based scenarios to provide the opportunity for teachers to collectively generate accommodations with guidance in the training. Cathy, an experienced dual general and special education certified teacher expressed, “I loved those ones because it put a face. It made it real, not just a kid.” Allowing the participants to work together to create simple modifications accommodating for student needs in the scenario provided the opportunity for teachers to practice skills during the professional training. In each focus group discussion, participants noted this aspect of the training taught them to approach students more inclusively in their classroom by attempting similar approaches with students with disabilities in their current classes.

The qualitative information leads to the conclusion the professional training triggered the development of more receptive views on implementing accommodations amongst participants.

Julie, an experienced general education teacher explained the impact of the training on teacher willingness to work on inclusive education with this example:

“It helped to remind us that the special ed(ucation) teachers aren’t calling these meetings to inconvenience us. So, we need to be on board and work with it to help them out. And we also need to be aware of the student needs, to look up their IEPs and see what’s on them. To pay more attention to that.”

Specifically, the noted growth in confidence participants reflected on in his/her own skills to implement accommodations meeting the needs of varied students with disabilities is a significant finding.

### **Conclusions**

Overall, data in this research study supports the use of a professional training delivered personally within a school or district as a tool for empowering secondary educators in working within inclusive education related to students with disabilities. Educators working at the secondary level display a lack of knowledge of federal regulations and practical application in the classroom in the form of accommodations. Focus on secondary educators with a variety of background certifications and experiences led the researcher to specific themes with agreement across the spectrum of participants. Prominent themes emerged in the analysis of the varied data sources for this research study.

Data gathered from multiple sources in this mixed-method research study support the hypothesis a lack of knowledge existed related to special education legalities and application amongst educators working in secondary schools. Significantly, information obtained at each of the five professional training sites supports conclusions the professional training delivered at school sites empowered practicing educators in different aspects of inclusive education. The

conclusion can be drawn professional training delivered personally at a school is an effective tool of empowerment to use with secondary educators working with special education students in the general education classroom. This conclusion is strengthened by drawing similar coded results from all on site locations of professional training. Analysis contributed to the conclusions reached, impact on professional practice, and suggestion for future research.

**Theme 1: Training in legal requirements and methods for successful accommodation related to students with disabilities empowers secondary education teachers practicing within expanding inclusive education.** Through the quantitative and qualitative data, educators indicated a significant lack of knowledge related to IDEA and other aspects of special education. Since IDEA and case law requires students with disabilities placement in the least restrictive environment (LRE) and the attainment of free-and-appropriate-education (FAPE), all educators need skills in assisting these students (Holinka, 2018; IDEA, 2004; Zirkel & Hetrick, 2017). Teacher certification programs at universities have begun to integrate some training in special education services (Brusca-Vega et al., 2014; Doktor, 2010; Grima-Farrell et al., 2014; Rotter, 2014). Teachers currently working in public schools, regardless of experience, indicate a significant lack of instruction either in pre-service training programs or within professional development in the field. Lack of training and knowledge specific to successful inclusion of students with disabilities in the general education classroom contribute to educators relying heavily on special education teachers to assist these students. Perceived inadequacies in teacher's knowledge of methods for teaching students with disabilities contributes to reluctance by the teacher in integrating special education students fully into the classroom.

Depth of understanding and knowledge by all teachers is needed for successful implementation of accommodations in the general education classroom and ensuring meeting the legal aspects of the highly regulated special education (Cramer et al., 2010; Eskay et al., 2012; Grima-Farrell et al., 2014; Holinka, 2018; U.S. Department of Education, 2005; Weatherly, 2018; Wright, 2016; Zirkel, 2018). Professional training specific to special education provide the opportunity for teachers to learn the skills and knowledge necessary to successfully facilitate inclusive general education classrooms. Participant educators specifically identified in the coding the professional training provided definitive ideas empowering their work with the students in their classrooms. Teachers noted varied means of integrating the information provided through the professional training enhancing their skills in facilitating the learning experiences of students with disabilities. Enhanced understanding of the legal requirements guiding schools in relation to students with disabilities was also noted by participants as contributing to empowerment in their participation with inclusive education.

**Theme 2: Secondary general education teachers need training specific to their role in development and use of the Individual Education Plan (IEP).** Developing an IEP for each student with a qualifying disability is a fundamental requirement of educational teams within the federal regulations and case law (Conroy et al., 2008; Fish, 2006; IDEA, 2004; Samuels, 2015; Zirkel, 2014). Teams of personnel with unique roles in providing educational services to the student are tasked with creating the IEP guiding all-inclusive educational services as the student progresses through the school system (Conroy et al., 2008; Fish, 2006; Samuels, 2015; Sanders, 2015; Yildiz, 2015; Zirkel, 2014). A lack of knowledge and training in the fundamental role general education teachers perform related to the IEP emerged as a dominant

theme in this research study. Expression of inadequate understanding of the role teachers are to perform in the IEP at each of the research sites was unanticipated by the researcher.

Teachers conveyed the information provided through the professional training enhanced their confidence in attending and contributing to an IEP meeting. Understanding the intent of the IEP in the student's educational system empowered teachers in knowing their professional expertise could positively impact the construction of the IEP to enhance the student's performance in the general education classrooms. This research study showed a variance in the method school districts use in conducting IEP meetings. Teachers need training regarding general information on the legal requirements of an IEP, as well as more specific district level information on development and implementation of IEPs.

**Theme 3. Professional training empowers educators in working with students with disabilities in the general education classroom.** Coded responses in this research study strongly indicate professional training on special education within a district will engender confidence in the staff working with students with disabilities. At each location participants noted the attendance of all staff together for the professional training enhanced the impact of the training. Staff member participation in the professional training on special education prompted further conversations pertaining to concepts from the training occurring among staff members outside of the training. Several participants noted the professional training in this research study was the first occurrence of general education staff being invited to a training related to special education.

Coding across different themes supported the finding educators are empowered by specific training offering insight into skills which enhance their work with students with disabilities. Teachers with varied backgrounds and experiences upon entering the profession



expressed affirmation the professional training enhanced their work with special education students in their classrooms. An experienced general education teacher, Abby, explained the impact of the professional training with this description:

“I felt more...not validated, but more in charge of their learning, like I can do it. I don’t have to rely solely on a special ed(ucation) teacher to tell me what to do for them. I can kind of take the helm, take the reins and....have more control over that.”

**Theme 4: Collaboration between general education and special education teachers enhances inclusive education for all students and teachers involved.** Collaboration amongst professional education staff is recognized as a key to success in adapting curriculum to the learning needs of students and building successful programs (Buli-Holmberg & Jeyaprabhan, 2016; Darrow, 2017; “High-leverage practices,” 2017; Kinsella-Meier & Gala, 2016; Yildiz, 2015). Desire expressed by general education staff for increased collaboration with special education experts illustrated recognition of a need for enhancing inclusive education services within schools. Collaboration amongst experts to increase knowledge is also an aspect of the empowerment theory contributing to a cycle of growth (Buli-Holmberg & Jeyaprabhan, 2016; Darrow, 2017; “High-leverage practices,” 2017; Kinsella-Meier & Gala, 2016; Yildiz, 2015).

The focus of the researcher was on the impact of the professional training on general education teachers practices within inclusive education. Collaboration emerged as a strong aspect of the different themes in the coding within the areas of legal training and accommodation strategies. Participant responses indicate even those secondary educators most reluctant in working with students with disabilities recognize collaboration with special education staff members able to provide insights will assist their skill attainment. School districts able to recognize and provide a means of supporting both general and special education

staff in collaborative efforts ensure progress in providing better services to students with disabilities. Teacher confidence in developing a successful, inclusive educational environment is enhanced by regular, school-level collaboration, as well as education team participation in professional training.

### **Recommendations for Further Research**

After completing analysis of data in this research study, information emerged suggesting future research areas. Several recommendations for further research revolve around the structure of training provided to teachers working within inclusive education or the type of information needed by teachers pertaining to inclusive education. Several studies have looked at training options (Akalın et al., 2014; Burden et al., 2010; Eskay et al., 2012; Gokdere, 2012; Kosko & Wilkins, 2009; Shurr et al., 2014), but a gap in research exists in exploring the information most needed by educators and how to most effectively deliver this information (Dretchen-Serapiglia, 2016; Nishimura, 2014; Peter, 2013; Shurr et al., 2014). Further research is needed connecting the lack of knowledge to specific aspects in the teaching field and best practices for teacher preparation and maintenance of educator knowledge working within inclusive education.

Several studies have noted a lack of knowledge of special education on the part of educators (Abbas et al., 2016; Alfaro et al., 2015; Dretchen-Serapiglia, 2016; Kleinert et al., 2015; Ryndak et al., 2014; Sanders, 2015; Weatherly, 2018). The current research study supported this with a finding of lack of knowledge among the secondary educator participants. Worthwhile further exploration and research would delve into the specific areas of knowledge related to inclusive education needed by educators. This research study focused on laws and strategies for accommodation.

Comments made by focus group respondents led to recommendations for further research. Participants serving students indicated having a desire for knowledge in the areas of types of disabilities and their differences, as well as more knowledge prior to entering the education profession. Further exploration and analysis in the knowledge teachers specifically lack and would find most beneficial in working with inclusive education is worthy of further research. Universities will need to develop effective classes for teacher education programs to assist those entering the profession be better prepared for teaching students with disabilities within inclusive settings.

The Individual Education Plan (IEP) designed for students by the team designated under the IDEA is one of the most fundamental parts of inclusive education (IDEA, 2004; Weatherly, 2018; Zirkel, 2018). Analysis of the current research study did show lack of knowledge specific to the creation and use of IEPs on the part of general education staff. A specific focus for further research should be investigating specific information all general educators desire pertaining to IEPs and how to best convey this knowledge to those entering the teaching profession. Since the varied states and school districts interpret differently the structure outlined within IDEA for developing IEPs, conducting research in the best training to provide for teachers working in the field to accommodate the variance encountered in IEP meetings and accommodation in the classroom would empower educators.

Further research should be conducted into the best method of training educational staff pertaining to inclusive education. A specific type of in-person, professional training was offered as part of this research study (Appendix G). Though previous studies have suggested different methods of professional development, these studies offer focus primarily on voluntary participation in the trainings or specified groups of educators. Further research comparing

styles of professional training to effectively conduct with a whole school staff pertaining to inclusive education. This future research could consider structurally the type of training to which staff is the most responsive, including time frame, frequency of training, and participants in training. Also, method of delivery and personnel delivering the training are factors to consider in future research studies considering the method to best create a professional training for general educators related to inclusive education.

Several focus group participants indicated for a researcher a repeated annual training would be beneficial. Research into the long-term impact on inclusive education of professional training for teachers should be conducted. Research conducted within a district willing to develop a long-term training plan regarding staff and special education services would provide further insight. This would provide states and districts information to better serve students with disabilities within inclusive education settings.

Additionally, school districts should be aware of the evolving legal requirements and information within special education, allowing for training teachers in current best practices. Since the researcher entered the education profession, legal policies and case law have changed the requirements of educators in numerous ways. As a general secondary education certified teacher, the researcher had been provided with no options for training until choosing individually to pursue further knowledge acquisition. Research considering how typical the researcher's experience is throughout school systems would be worth pursuing. Determining training methods which can assist in supporting the general education teacher's ability to acquire prevailing information consistently would be worthwhile to consider in this type of research study. Recent participation in a legal training also prompted the researcher to consider where the burden of responsibility exists for understanding the legal responsibilities within

education law (Weatherly, 2018). Research studies considering the evolution of education laws and court case rulings and the resulting impact on education personnel and settings would be informative in future inquiries.

The final recommendation for further research is drawn from the comments made by participants in the focus groups who came to the teaching profession through an alternate certification route. Alternate certification for teaching for individuals who come to education from other professions has garnered attention and focus in the last several years (“Alternative teaching certification,” 2018; U.S. Department of Education, 2004). As more individuals enter the teaching profession through this certification route, lacking familiarity with special education, consideration should be given in how to better assist them (“Alternative teaching certification,” 2018; U.S. Department of Education, 2004). A recommendation for further research should be specifically considering the alternate certification requirements and the manner in which inclusive education relates. Specifically researching teachers with alternate certification and the assistance they may desire or need related to inclusive education is an area needing further development.

### **Implications for Professional Practice**

Inclusive education pertaining to students with disabilities is an important area in which teachers in public schools must be highly knowledgeable and capable (Abbas et al., 2016; Etscheidt, 2007; Holinka, 2018; Kleinert et al., 2015; Ryndak et al., 2014; Weatherly, 2018). Analysis of the results of this mixed-method research study provides information with application for educational staff at many levels. From university programs to district and specific school level personnel, all educators involved in preparing for and providing services for students with disabilities in inclusive settings should gain insights from this research.

Inclusive education, students with disabilities receiving education services alongside peers in general education classrooms, is a hallmark of modern public schooling (Holinka, 2018; IDEA, 2004; Weatherly, 2018; Wright, 2016). However, this study provides evidence teachers lack needed knowledge of governing laws, case law standards, and accommodation strategies (Samuels, 2015; Wright, 2016; Zirkel, 2014; Zirkel & Hetrick, 2017). As reflected by participants in this research study, increased knowledge of special education law and best practices in inclusive education is both needed and desired by teachers, especially those on the secondary level. Universities preparing teachers and school district administrators should develop training programs and practices to assist teachers with acquiring needed information. For school districts, as shown in this study, professional trainings for whole staff can have a positive impact on teaching practices if specifically focused on the needs of the teachers.

In one of the participant school districts, the special education director took the information shared by teachers in response to the professional training provided to the staff and began developing and delivering more special education training within the district. Belief in the district prior to involvement in this research study, as shared by this director with the researcher, was special education training should be provided solely to the director of special services and special education teachers. Training special education personnel, according to district philosophy, allowed the special education students to be well-served. However, after participating in the training aspect of this research and the resulting questions and discussion raised by the teachers during and after the training changed the district belief and approach. Secondary teachers in this district indicated a lack of knowledge and understanding of IEPs, implementing accommodations, and a heavy reliance on the special education teachers to bear all the responsibility of educating the special education students. In efforts to improve the

educational services provided to students with disabilities throughout the district and lighten the workload of special education staff, this district director developed mini-trainings for the teachers to be given on regular teacher preparation days throughout the remainder of the school year. This current research study showing the positive impact of professional training for all educators on inclusive education within school districts has similar implication for additional districts.

As allowed within professional practice, the researcher plans to incorporate knowledge from this research study. The researcher has already designed four small-scale, specific professional trainings to be delivered quarterly in the school district where currently employed. Topics were drawn from the information obtained in the data analysis from this research study. General content to be delivered in the professional trainings include overview of governing special education laws and policies, district expectations for general education teacher participation in the IEP, implementing classroom accommodations, and facilitating teacher collaboration between general education and special education certified personnel to enhance inclusive classrooms. Additionally, the researcher has recommended a component of the new teacher orientation for the school district include information and training on district practices pertaining to special education, with specific information on the eminent legal aspects.

Research in this study focused on specific areas within inclusive education which may grow and be strengthened by professional training. Gaining additional understanding concerning IEPs and having the knowledge and confidence to implement accommodations for students with disabilities in the classroom is a need for those teachers working in public school settings. Implication for school districts is to consider specific areas within inclusive education most important for teachers to received support and then provide specific support. As indicated

by this research study, empowerment in understanding, involvement, and application of IEPs is a desire of general education teachers. Those who are in position to assist in training teachers should consider this information and find effective methods for expanding teacher knowledge. As shown in this research study, professional trainings offered on specific topics can be beneficial for general education teachers. Professional trainings should be considered by those creating learning opportunities for teachers as an effective method.

IDEA requires schools conduct an annual IEP meeting to support the learning of a student with a disability (Etscheidt, 2007; IDEA, 2004; Rotter, 2014; Zirkel, 2018). Active and informed participation by general education teachers in the IEP meeting is needed for the student's needs to be adequately met through accommodations in the least restrictive environment (LRE) of the general classroom (Diliberto & Brewer, 2012; Etscheidt, 2007; Fish, 2008; Holinka, 2018; IDEA, 2004; Rotter, 2014; Weatherly, 2018). Information from this research study indicates school districts must improve facilitation of these required IEP meetings to ensure general education teacher is adequate. School districts should consider establishing guidelines within the framework established in the federal and state guidelines (IDEA, 2004; Weatherly, 2018; Zirkel, 2018) for their educators to follow ensuring more effective functionality in the IEP meetings. Information in this study indicated school districts must develop more effective methods for helping teachers know their students with IEPs and assisting them in making positive contributions in the annual meeting to the development of the student's IEPs. Developing systems assisting robust IEP meetings to be held within school districts will also ensure the standards established in *Endrew v. Douglas Co. School District* (2017) by the U.S. Supreme Court will be met (Holinka, 2018; Samuels, 2018; Weatherly, 2018; Zirkel, 2018). School districts aware of the importance of educational teams in IEP meetings,



compliance with the law, and inclusive education and working on methods to support these teams ensure growth of inclusive education as this aspect of schooling evolves. Professional training empowers teachers working in inclusive teaching enhancing the education services provided for all students within public schools.

## References

- Abbas, F., Zafar, A., & Naz, T. (2016). Footstep towards inclusive education. *Journal of Education and Practice*, 7(10), 48-52.
- Agarwal, N., Moya, E., Yasui, N., & Seymour, C. (2015). Participatory action research with college students with disabilities: Photovoice for an inclusive campus. *Journal of Postsecondary Education and Disability*, 28(2), 243-250.
- Akalin, S., Demir, S., Sucuoglu, B., Bakkaloglu, H., & Iscen, F. (2014). The needs of inclusive preschool teachers about inclusive practices. *Eurasian Journal of Educational Research*, 54, 39-60.
- Alfaro, V., Kupczynski, L., & Mundy, M. (2015). The relationship between teacher knowledge and skills and teacher attitude towards students with disabilities among elementary, middle and high school teachers in rural Texas schools. *Journal of Instructional Pedagogies*, 16(1), 22-30.
- Allen, I., & C. Seaman. (2007, July). Likert scales and data analyses. *Quality Progress: Putting Best Practices to Work*. Retrieved from <http://asq.org/quality-progress/>
- Allen, N., Grigsby, B., & Peters, M. (2015). Does leadership matter? Examining the relationship among transformational leadership, school climate, and student achievement. *International Journal of Educational Leadership Preparation*, 10(2), 1-22.
- Alrubail, R., & Murray, T. (2015). 5 issues every 'future ready' school leader must address. *Future Ready Initiative*. Retrieved from [www.edsurge.com](http://www.edsurge.com)
- Ansley, B., Houchins, D., & Varjas, K. (2016). Optimizing special educator wellness and job performance through stress management. *Council for Exceptional Children*, 48(4), 176-185.

- Archibald, T., & Wilson, A. (2011) Rethinking empowerment: Theories of power and the potential for emancipatory praxis. *Proceedings of the 52<sup>nd</sup> Annual Adult Education Research Conference*, (52), 22-28.
- Armendariz, G., & Jung, A. (2016). Response to intervention vs. severe discrepancy model: Identification of students with specific learning disabilities. *Journal of Special Education Apprenticeship*, 5(1), 291-309.
- Benedict, A., Brownell, M., Park, Y., Bettini, E., & Lauterbach, A. (2014). Taking charge of your professional learning: Tips for cultivating special educator expertise. *TEACHING Exceptional Children*, 46(6), 147-157.
- Berry, A. B., & Gravelle, M. (2013). The benefits and challenges of special education positions in rural settings: Listening to the teachers. *Rural Educator*, 34(2), 1-13.
- Billingsley, B.S. (2004a). Promoting teacher quality and retention in special education. *Journal of Learning Disabilities*, 37 (5), 370-376. doi: org/10.1177/00222194040370050101
- Billingsley, B.S. (2004b). Special education teacher retention and attrition: A critical analysis of the research literature. *Journal of Special Education*, 38 (1), 39-55.
- Board of Education of Hendricks Hudson Central School District v. Rowley. 458 U.S. 176. 1982.
- Boe, E. (2006). Long-term trends in the national demand, supply, and shortage of special education teachers. *The Journal of Special Education*, 40(3), 138-150.
- Boe, E., Bobbitt, S., & Cook, L. (1993). Whither didst thou go? Retention, reassignment, migration, and attrition of special and general education teachers in national perspective. *The Journal of Special Education*. 30(4), 371-389.
- Bonds, C., & Lindsey, J. (1982). The principal in special education: The teachers' perspective. *Education*, 102(104), 407-410.

- Boroson, B. (2017). *Autism spectrum disorder in the inclusive classroom*. New York City, NY: Scholastic Corporation.
- Bradshaw, L. (2015). Planning considerations for afterschool professional development. *Afterschool Matters*, (21), 46-54.
- Brantlinger, E., Jimenez, R., Klingner, J., Pugach, M., & Richardson, V. (2005). Qualitative studies in special education. *Exceptional Children*, 71(2), 195-207.
- Brown v. Board of Education of Topeka. 347 U.S. 483. 1954.
- Brownell, M., Smith, S., McNellis, J. & Miller, D. (1997). Attrition in special education: Why they leave the classroom and where they go. *Exceptionality*, 7, 143-155.
- Brunsting, N., Sreckovic, M. & Lane, K. (2014). Special education teacher burnout: A synthesis of research from 1979 to 2013. *Education and Treatment of Children*, 37(4), 681-711.
- Brusca-Vega, R., Alexander, J., & Kamin, C. (2014). In support of access and inclusion: joint professional development for science and special educators. *Global Education Review*, 1(4), 37-52.
- Buli-Holmberg, J., & Jeyaprabhan, S. (2016). Effective practice in inclusive and special needs education. *International Journal of Special Education*, 31(1), 119-134.
- Burden, R., Tinnerman, L., Lunce, L., & Runshe, D. (2010). Video case studies: Preparing teachers for inclusion. *TEACHING Exceptional Children Plus*, 6(4), 1-11.
- Bureau of Labor Statistics, U.S. Department of Labor. (July, 2017). *Occupational Outlook Handbook, 2016-17 Edition*. Retrieved from <http://www.bls.gov/>
- Byers, P., & Wilcox, J. (1988). Focus groups: An alternative method of gathering qualitative data in communication research. *Paper presented at the Annual Meeting of the Speech*

- Communication Association*. (74<sup>th</sup>, New Orleans, LA, November, 1988).
- Cancio, E., Albrecht, S., & Johns, B. (2013). Defining administrative support and its relationship to the attrition of teachers of students with emotional and behavioral disorders. *Education & Treatment of Children, 36*(4), 71-94.
- Carter, E., Moss, C., Asmus, J., Fesperman, E., Cooney, M., Brock, M., & ... Vincent, L. (2015). Promoting inclusion, social connections, and learning through peer support arrangements. *TEACHING Exceptional Children, 48*(1), 9-18.
- Casale-Giannola, D. (2012). Comparing inclusion in the secondary vocational and academic classrooms: Strengths, needs, and recommendations. *American Secondary Education, 40*(2), 26-42.
- Cedar Rapids Community School District v. Garret F. 526 U.S. 66. 1999.
- Chant, R., Moes, R., & Ross, M. (2009). Curriculum construction and teacher empowerment: Supporting invitational education with a creative problem solving model. *Journal of Invitational Theory and Practice, 15*, 55-67.
- Conroy, T., Yell, M., & Katsiyannis, A. (2008). "Schaffer v. Weast": The Supreme Court on the burden of persuasion when challenging IEPs. *Remedial and Special Education, 29*(2), 108-117.
- Combs, S., Elliott, S., & Whipple, K. (2010). Elementary physical education teachers' attitudes towards the inclusion of children with special needs: A qualitative investigation. *International Journal of Special Education, 25*(1), 114-125.
- Coots, J. (2007). Building bridges with families: Honoring the mandates of IDEIA. *Issues in Teacher Education, 16*(2), 33-40.
- Council for Exceptional Children. (2016). *Engaging the potential*. Retrieved from

<https://www.cec.sped.org/Professional-Development>

- Cramer, E., Liston, A., Nevin, A., & Thousand, J. (2010). Co teaching in urban secondary school districts to meet the needs of all teachers and learners: Implications for teacher education reform. *International Journal of Whole Schooling*, 6 (2), 59-76.
- Da Fonte, M., & Capizzi, A. (2015). A module-based approach: Training paraeducators on evidence-based practices. *Physical Disabilities: Education and Related Services*, 34(1), 31-54.
- Daly-Cano, M., Vaccaro, A., & Newman, B. (2015). College student narratives about learning and using self-advocacy skills. *Journal of Postsecondary Education and Disability*, 28(2), 213-227.
- Damer, L. (2004). Inclusion and the law. *Music Educators Journal*, 87(4), 19-22.
- Darling-Hammond, L. (2016). Recruiting and retaining teachers: What matters most and what can government do? *The Forum for Education and Democracy*. Retrieved from <http://www.forumforeducation.org/news>
- Darrow, A. (2017). Meaningful collaboration in the inclusive music classroom: Students with severe intellectual disabilities. *General Music Today*, 31(1), 40-43.
- Daves, D., & Walker, D. (2012). RTI: Court and case law – confusion by design. *Learning Disability Quarterly*, 35(2), 68-71.
- Debbag, M. (2017). Opinions of prospective classroom teachers about their competence for individualized education program (IEP). *Universal Journal of Educational Research*, 5(2), 181-185.
- Delisle, D. (2017). Business invests in professional learning. Why doesn't education? *Education Week*. Retrieved from [www.edweek.org/](http://www.edweek.org/)

- Demirdag, S. (2017). What instructional leaders need to know about the effects of inclusion. *European Journal of Educational Research, 6*(2), 175-186.
- Dewey, J., Sindelar, P., Bettini, E., Boe, E., Rosenberg, M., & Leko, C. (2017). Explaining the decline in special education teacher employment from 2005 to 2012. *Exceptional Children, 83*(3), 315-329.
- Dieterich, C., & Smith, K. (2015). The impact of special education law on career and technical education. *American Secondary Education, 43*(3), 60-72.
- Diliberto, J., & Brewer, D. (2012). Six tips for successful IEP meetings. *TEACHING Exceptional Children, 44*(4), 30-37.
- Doe and Doe v. Withers. 20 IDELR 422. 1992.
- Doktor, J. (2010). Promoting inclusive classrooms: The mutuality of interests between professional development school partners. *School-University Partnerships, 4*(1), 7-14.
- Dretchen-Serapiglia, A. (2016). *Teachers' knowledge of special education procedure and its impact on teaching self-efficacy* (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global. (Order No., 1790115620).
- Editor: Alternative teaching certification. (2018). *Teaching Certification*. Retrieved from [www.teaching-certification.com](http://www.teaching-certification.com)
- Editor: Analyzing focus group data. (2017). *University of Texas*. Retrieved from <http://facultyinnovate.utexas.edu/>
- Editor. News from CEC: High-leverage practices in special education. (2017). *TEACHING Exceptional Children, 49*(5), 355-360.
- Editor: Organizing your social sciences research paper: Quantitative methods. (2016). *University*

of *Southern California Research Guides*. Retrieved from

<http://libguides.usc.edu/writingguide/quantitative/>

Editor: Paulo Freire biography. (2017). *Freire Institute*. Retrieved from

<http://www.freire.org/paulo-freire/paulo-freire-biography>

Editor: Special education personnel shortages factsheet. (2017). *National Coalition on Personnel Shortages in Special Education and Related Services*. Retrieved from

<http://www.specialedshortages.org>

Editor: The fight for civil rights for people with disabilities. [Editorial]. (2017). *Disability Justice*. Retrieved from <http://www.disabilityjustice.org/>

Editor: The history of special education in the United States. [Editorial]. (2015). *Special Education News*. Retrieved from <http://www.specialednews.com/>

Editorial: The need for special education teachers. [Editorial]. (2015). *Education Degree*. Retrieved from <http://www.educationdegree.com/articles/>

Editorial. Together we learn better: Inclusive schools benefit all children. [Editorial]. (2015). *Inclusive Schools Network*. Retrieved from <https://inclusiveschools.org>

Editorial: The Rowley decision. [Editorial]. (2017). *Massachusetts Advocates for Children*. Retrieved from <http://www.massadvocates.org/>

Editorial: Who we are. [Editorial]. (2017). *Special Olympics International*. Retrieved from <http://www.specialolympics.org/>

Editorial: Understanding the Supreme Court decision on students with disabilities: An interview with Natasha Strassfeld. [Editorial]. (2017). *News from Steinhardt School of Culture, Education and Human Development*. Retrieved from <http://steinhardt.nyu.edu/>

Andrew F. v. Douglas County School District RE-1. 69 IDELE. 2017.



- Eskay M., Onu V.C., Ugwuanyi I., Obiyo N.O., & Udaya J. (2012). Preparing teachers for special education in the United States: A reflection. *US-China Education Review, 4*, 394-407.
- Etscheidt, S. (2007). The excusal provision of the IDEA 2004: Streamlining procedural compliance or prejudicing rights of students with disabilities? *Preventing School Failure, 51*(4), 13-18.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Thousand Oaks, California: SAGE Publications.
- Fish, W. (2006). Perceptions of parents of students with autism towards the IEP meeting: A case study of one family support group chapter. *Education, 127*(1), 56-68.
- Fish, W. (2008). The IEP meeting: Perceptions of parents of students who receive special education services. *Preventing School Failure, 53*(1), 8-14.
- Frost, L., & Kersten, T. (2011). The role of the elementary principal in the instructional leadership of special education. *International Journal of Educational Leadership Preparation, 6*(2), 1-21.
- Fry v. Napoleon Community School District, 580 U.S. 15-497. 2017.
- Gable, R., Tonelson, S., Sheth, M., Wilson, C., & Park, K. (2012). Importance, usage, and preparedness to implement evidence-based practices for students with emotional disabilities: A comparison of knowledge and skills of special education and general education teachers. *Education and Treatment of Children, 35*(4), 499-520. doi: 10.1353/etc.2012.0030
- Garland, D., Garland, K., & Vasquez, E. (2013). Management of classroom behaviors: Perceived readiness of education interns. *Journal of the Scholarship of Teaching and*

- Learning*, 13(2), 133-147.
- Garrison-Wade, D., Sobel, D., & Fulmer, C. (2007). Inclusive leadership: Preparing principals for the role that awaits them. *Educational Leadership and Administration: Teaching and Program Development*, 19, 117-132.
- Geoff, P., & Williams, M. (2011). Teaching quantitative methods: Getting the basics right. Thousand Oaks, California: SAGE Publications.
- Gersten, R., Keating, T., Yovanoff, P., & Harniss, M. (2001). Working in special education: Factors that enhance special educators' intent to stay. *Exceptional Children*, 67(4), 549-567.
- Ginger, J. (2006). From the trenches: Secondary content teachers and IEP, inclusion students. *Forum on Public Policy Online*, 1.
- Godbold, W. (2013). Empowered teachers will change the world. *Southeast Education Network*. Retrieved from [www.seenmagazine.us/](http://www.seenmagazine.us/)
- Gokdere, M. (2012). A comparative study of the attitude, concern, and interaction levels of elementary school teachers and teacher candidates towards inclusive education. *Educational Sciences: Theory and Practice*, 12(4), 2800-2806.
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8(4), 597-606.
- Goor, M., & Schwenn, J. (1997). Preparing principals for leadership in special education. *Intervention in School & Clinic*, 32(3), 133-150.
- Grima-Farrell, C., Long, J., Bentley-Williams, R., & Laws, C. (2014). A school system and university approach to reducing the research to practice gap in teacher education: A collaborative special education immersion project. *Australian Journal of Teacher*

- Education*, 39 (5), 88-98.
- Groves, T. (2011). Looking up to Paulo Freire: Education and political culture during the Spanish transition to democracy. *Paedagogica Historica*, 47(5), 701-717.
- Guerra, J. (2015, June 4). Teachers say they do not get enough training around special ed issues. Retrieved from <http://stateofopportunity.michiganradio.org/>
- Gurgur, H., & Uzuner, Y. (2010). A phenomenological analysis of the views on co-teaching applications in the inclusion classroom. *Educational Sciences: Theory and Practice*, 10(1), 311-331.
- Hale, L. (2015). Behind the shortage of special ed teachers: Long hours, crushing paperwork. *National Public Radio*. Retrieved from <http://www.npr.org/>
- Hamilton-Jones, B., & Vail, C. (2014). Preparing special educators for collaboration in the classroom: Preservice teachers' beliefs and perspectives. *International Journal of Special Education*, 29(1), 76-86.
- Hebbeler, K., & Spiker, D. (2016). Supporting young children with disabilities. *Future of Children*, 26(2), 185-205.
- Higginson, R., & Chatfield, M. (2012). Together we can do it: A professional development project for regular teachers of children with autism spectrum disorder. *Kairaranga*, 13(2), 29-40.
- Hipolito-Delgado, C., & Lee, C. (2007). Empowerment theory for the professional school counselor: A manifesto for what really matters. *Professional School Counseling*, 10(4), 327-332.
- Holcomb-McCoy, C., & Bryan, J. (2010). Advocacy and empowerment in parent consultation: Implications for theory and practice. *Journal of Counseling & Development*, 88(3), 259-

268.

Holinka, J. (2018, May). *The art of the IEP in a post-Andrew F. world*. Paper presented at the 19<sup>th</sup> Annual Law Conference Special Student Populations and the Law.

Honig v. Doe. 484 U.S. 305. 1988.

Howe, A. (2017, February). Opinion analysis: Court outlines boundaries between disabilities, education case. *SCOTUSblog*. Retrieved from [www.scotusblog.com/](http://www.scotusblog.com/)

Huber, K., Rosenfeld, J., & Fiorello, C. (2001). The differential impact of inclusion and inclusive practices on high, average, and low achieving general education students. *Psychology in the Schools*, 38(6), 497-504.

Hur, M. (2006). Empowerment in terms of theoretical perspectives: Exploring a typology of the process and components across disciplines. *Journal of Community Psychology*, 34(5), 523-540.

Hurd, W., & Piepgrass, S. (2009). Special education law. *University of Richmond Law Review*, 44(2), 17-52.

Hwang, Y., & Evans, D. (2011). Attitudes towards inclusion: Gaps between belief and practice. *International Journal of Special Education*, 26(1), 136-146.

Idol, L. (2006). Toward inclusion of special education students in general education. *Remedial and Special Education*, 27, 77-94.

Individuals with Disabilities Education Act Amendments of 1997, 20 U.S.C. § 1400 *et seq.* (1997).

Individuals with Disabilities Education Improvement Act of 2004, 20 U.S.C. § 1400 *et seq.* (2004).

Irving Independent School District v. Tatro. 468 U.S. 883. 1984.

Jacob Winkelman v. Parma City School District. 550 U.S. 516. 2007.

Johnson, E. (2015). Increasing rural special education teacher candidates' ability to implement evidence-based practices: A program description of the Boise State University TATERS Program. *Rural Special Education Quarterly*, 34(1), 5-9.

Johnson, G. (2013). Using tablet computers with elementary school students with special needs: The practices and perceptions of special education teachers and teacher assistants. *Canadian Journal of Learning and Technology*, 39(4), 1-12.

Johnson, S. (2003). Reexamining Rowley: A new focus in special education law. *Harbor House Law*. Retrieved from [www.harborhouselaw.com/](http://www.harborhouselaw.com/)

Kain, E., (March, 2011). High teacher turnover rates are a big problem for America's public schools. *Forbes Education*. Retrieved from [www.forbes.com/sites/](http://www.forbes.com/sites/)

Kamenetz, A., & Turner, C. (2017). The Supreme Court rules in favor of a special education student. *National Public Radio*. Retrieved from <http://www.npr.org>

Kamil, M., Shantini, Y., & Sardin. (2015). Education empowerment model for the disabled learner: A case study at Cicendo school for special education. *International Education Studies*, 8(7), 139-143.

Karge, B., & McCabe, M. (2014). Quality alternative certification programs in special education ensure high retention. *Journal of the National Association for Alternative Certification*, 9(2), 24-43.

Katz, J., & Sokal, L. (2016). Universal Design for Learning as a bridge to inclusion: A qualitative report of student voices. *International Journal of Whole Schooling*, 12(2), 36-63.

Kee, C., Osman, K., & Ahmad, F. (2013). Challenge in enhancing the teaching and learning of

- variable measurements in quantitative research. *International Education Studies*, 6(6), 15-22.
- Kennedy, E., & Shiel, G. (2010). Raising literacy levels with collaborative on-site professional development in an urban disadvantaged school. *Reading Teacher*, 63(5), 372-383.
- Kessell, J., Wingebach, G., & Lawver, D. (2009). Relationships between special education confidence, knowledge, and selected demographics for agricultural education student teachers. *Journal of Agricultural Education*, 50(2), 53-63.
- Keyes, S., & Brandon, T. (2012). Mutual support: A model of participatory support by and for people with learning difficulties. *British Journal of Learning Disabilities*, 40(3), 222-228.
- Kilanowski-Press, L., Foote, C., & Rinaldo, V. (2010). Inclusion classrooms and teachers: A survey of current practices. *International Journal of Special Education*, 25(3), 43-56.
- Kinsella-Meier, M., & Gala, N. (2016). Collaboration: Definitions and explorations of an essential partnership. *Odyssey: New Directions in Deaf Education*, 174-179.
- Kleinert, H., Towles-Reeves, E., Quenemoen, R., Thurlow, M., Fluegge, L., Weseman, L., & Kerbel, A. (2015). Where students with the most significant cognitive disabilities are taught: Implications for general curriculum access. *Exceptional Children*, 81(3), 312-328.
- Köksal, M., Ertekin, P., & Çolakoglu, Ö. (2014). How differences among data collectors are reflected in the reliability and validity of data collected by Likert-type scales? *Educational Sciences: Theory and Practice*, 14(6), 2206-2212.
- Kosko, K., & Wilkins, J. (2009). General educators' in-service training and their self-perceived ability to adapt instruction for students with IEPs. *Professional Educator*, 33(2), 46-57.
- Kourkoutas, E., Eleftherakis, T., Vitalaki, E., & Hart, A. (2015). Family-school-professionals partnerships: An action research program to enhance the social, emotional, and academic

- resilience of children at risk. *Journal of Education and Learning*, 4(3), 112-122.
- Kowalski, E., Lieberman, L., & Daggett, S. (2006). Getting involved in the IEP Process. *Journal of Physical Education, Recreation & Dance (JOPERD)*, 77(7), 35-39.
- Kurth, J., Lyon, K., & Shogren, K. (2015). Supporting students with severe disabilities in inclusive schools: A descriptive account from schools implementing inclusive practices. *Research and Practice for Persons with Severe Disabilities*, 40(4), 261-274.
- La Salle, T., Roach, A., & McGrath, D. (2013). The relationship of IEP quality to curricular access and academic achievement for students with disabilities. *International Journal of Special Education*, 28(1), 135-144.
- Laprairie, K., Johnson, D., Rice, M., Adams, P., & Higgins, B. (2010). The top ten things new high school teachers need to know about servicing students with special needs. *American Secondary Education*, 38(2), 23-31.
- Lee, Y., Patterson, P., & Vega, L. (2011). Perils to self-efficacy perceptions and teacher-preparation quality among special education intern teachers. *Teacher Education Quarterly*, 38(2), 61-76.
- Littrell, P., Billingsley, B., & Cross, L. (1994). The effects of principal support on special and general educators' stress, job satisfaction, school commitment, health, and intent to stay in teaching. *Remedial and Special Education*, 15(5), 297-310.
- Loewus, L. (2017). How virtual reality is helping train new teachers. *Education Week*. Retrieved from [www.edweek.org/](http://www.edweek.org/)
- Love, T., Kreiser, N., Camargo, E., Grubbs, M., Kim, E., Burge, P., & Culver, S. (2015). STEM faculty experiences with students with disabilities at a land grant institution. *Journal of Education and Training Studies*, 3(1), 27-38.

- Lowrey, A., Hollingshead, A., Howery, K., & Bishop, J. (2017). More than one way: Stories of UDL and inclusive classrooms. *Research and Practice for Person with Severe Disabilities, 42*(4), 225-242.
- Lund, T. (2012). Combining qualitative and quantitative approaches: Some arguments for mixed methods research. *Scandinavian Journal of Educational Research, 56* (2), 155-165.
- Lumpkin, A., Claxton, H., & Wilson, A. (2014). Key characteristics of teacher leaders in schools. *Administrative Issues Journal: Education, Practice, and Research, 4*(2), 59-67.
- MacGlaughlin, H., & Mertens, D. (2014). High expectations require supporting new teachers, educating the school community. *Odyssey: New Directions in Deaf Education, 15*. 46-49.
- Mahadevan, L., Grenwelge, C., & Peterson, R. (2014). CTE and IEPs: Making the system work for all. *Techniques, 33-35*.
- Marshall, C., & Rossman, G. (2016). Designing qualitative research. Thousand Oaks, California: SAGE Publications.
- Mastropieri, M., Scruggs, T., Norland, J., Berkeley, S., McDuffie, K., Tornquist, E., & Connors, N. (2006). Differentiated curriculum enhancement in inclusive middle school science: Effects on classroom and high-stakes tests. *Journal of Special Education, 40*(3), 130-137.
- McCord, K., & Watts, E. (2010). Music educators' involvement in the individual education program process and their knowledge of assistive technology. *Update: Applications of Research in Music Education, 28*(2), 79-85.
- McLeskey, J., Landers, E., Hoppey, D., & Williamson, P. (2011). Learning disabilities and the LRE Mandate: An examination of national and state trends. *Learning Disabilities Research & Practice, 26*(2), 60-66.



- McMenamin, M., & Zirkel, P. (2003). OCR rulings under Section 504 and the Americans with Disabilities Act: Higher education student cases. *Journal of Postsecondary Education and Disability, 16*(2), 55-62.
- Melekoglu, M. (2013). Examining the impact of interaction project with students with special needs on development of positive attitude and awareness of general education teachers towards inclusion. *Educational Sciences: Theory and Practice, 13*(2), 1067-1074.
- Menlove, R., Hudson, P., & Suter, D. (2001). A field of IEP dreams: Increasing general education teacher participation in the IEP development process. *TEACHING Exceptional Children, 33*(5), 28-33.
- Mereoiu, M., Abercrombie, S., & Murray, M. (2016). One step closer: Connecting parents and teachers for improved student outcomes. *Cogent Education, 3*(1), 1-19.
- Mette, I., Nieuwenhuizen, L., & Hvidston, D. (2016). Teachers' perceptions of culturally responsive pedagogy and the impact on leadership preparation: Lessons for future reform efforts. *International Journal of Educational Leadership Preparation, 11*(1).
- Mills v. Board of Education of District of Columbia. 348 F. Supp. 866. 1972.
- Moshe, A. (2017). Inclusion assistants in general education settings – A model for in-service training. *Universal Journal of Educational Research, 5*(2), 209-216.
- Mueller, T., Singer, G., & Draper, L. (2008). Reducing parental dissatisfaction with special dispute resolution. *Journal of Educational and Psychological Consultation, 18*(3), 191-233.
- Murray, M., Handyside, L., Straka, L., & Arton-Titus, T. (2013). Parent empowerment: Connecting with preservice special education teachers. *School Community Journal, 23*(1), 145-168.

- Musyoka, M., Gentry, M., & Bartlett, J. (2015). Voices from the classroom: Experiences of teachers of deaf students with additional disabilities. *Journal of Education and Training Studies, 4*(2), 85-96.
- Nikolaros, J. (2014). High school teachers with significant teaching experience support the effectiveness of direct instructional strategies. *Contemporary Issues in Education Research, 7*(3), 189-194.
- Nishimura, T. (2014). Effective professional development of teachers: A guide to actualizing inclusive schooling. *International Journal of Whole Schooling, 10*(1), 19-42.
- Odom, S., Brantlinger, E., Horner, R., Thompson, B., & Harris, K. (2005). Research in special education: Scientific methods and evidence-based practices. *Exceptional Children, 71*(2), 137-148.
- Olson, A., Leko, M., & Roberts, C. (2016). Providing students with severe disabilities access to the general education curriculum. *Research and Practice for Persons with Severe Disabilities, 41*(3), 143-157.
- Orr, A. (2009). New special educators reflect about inclusion: Preparation and K-12 current practice. *Journal of Ethnographic and Qualitative Research, 3*, 228-239.
- Otto, S., & Arnold, M. (2005). A study of experienced special education teachers' perceptions of administrative support. *College Student Journal, 39*(2), 253-257.
- Patrikakou, E., Ockerman, M., & Hollenbeck, A. (2016). Needs and contradictions of a changing field: Evidence from a national response to intervention implementation study. *Professional Counselor, 6*(3), 233-250.
- Pearrow, M., & Pollack, S. (2009). Youth empowerment in oppressive systems: Opportunities for school consultants. *Journal of Educational and Psychological Consultation, 19*, 45-

60.

Pellegrino, A., Weiss, M., & Regan, K. (2015). Learning to collaborate: General and special educators in teacher education. *The Teacher Educator*, 50, 187-202.

Pence, A., & Dymond, S. (2016). Teachers' beliefs about the participation of students with severe disabilities in school clubs. *Research and Practice for Persons with Severe Disabilities*, 41(1), 52-68.

Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania. 343 F. Supp. 279. 1972.

Perkins, D., & Zimmerman, M. (1995). Empowerment theory, research, and application. *American Journal of Community Psychology*, 23(5), 569-579.

Peter, M. (2013). Training special educators: Sustaining professional development in special school placements. *Support for Learning*, 28(3), 122-132.

Petersen, A. (2016). Perspectives of special education teachers on general education curriculum access. *Research and Practice for Persons with Severe Disabilities*, 41(1), 19-35.

Ponomareva, G.M. (2015). What successful school principals do and what unsuccessful ones fail to do. *Russian Education and Society*, 57 (1). 36-47.

Prather-Jones, B. (2011). How school administrators influence the retention of teachers of students with emotional and behavioral disorders. *A Journal of Educational Strategies, Issues and Ideas*, 84(1), 1-8.

Rambo, E. (2017). Back to school, back to learning: How teachers can set their own professional learning goals. *Education Week*. Retrieved from [www.edweek.org/](http://www.edweek.org/)

Ramdhani, N., Ancok, D., Swasono, Y., & Suryanto, P. (2012). Teacher quality improvement program: Empowering teachers to increasing a quality Indonesian's education. *Procedia*

*Social and Behavioral Sciences*, 69. 1836-1841.

- Ravitch, S., & Riggan, M. (2016). Reason and Rigor: How conceptual frameworks guide research. Thousand Oaks, California: SAGE Publications.
- Ricci, L. A., & Zetlin, A. G. (2013). Interweaving teaching and emotional support for novice special educators in alternative certification programs. *Journal of the National Association for Alternative Certification*, 8(2), 23-42.
- Rice, M., & Carter, R. (2015). “When we talk about compliance, it’s because we lived it” online educators’ roles in supporting students with disabilities. *Online Learning* 19(5), 18-36.
- Romero, L., Wallerstein, N., Lucero J., Fredine, H., Keefe, J., & O’Connell, J. (2006). Woman to woman: Coming together for positive change – using empowerment and popular education to prevent HIV in women. *AIDS Education and Prevention*, 18(5), 390-405.
- Ross, S., & Lignugaris-Kraft, B. (2015). Multi-tiered systems of support preservice residency: a pilot undergraduate teacher preparation model. *Journal of the National Association for Alternative Certification*, 10(1), 3-20.
- Rotter, K. (2014). IEP use by general and special education teachers. *SAGE Open*, 2, 1-8.
- Ruechakul, P., Erawan, P., & Siwarom, M. (2015). Empowering communities in educational management: Participatory action research. *International Education Studies*, 8(9), 65-78.
- Russell, J., & Bray, L. (2013). Crafting coherence from complex policy messages: Educators’ perceptions of special education and standards-based accountability policies. *Education Policy Analysis Archives*, 21(12), 1-25.
- Ryndak, D., Taub, D., Jorgensen, C., Gonsier-Gerdin, J., Arndt, K., Sauer, J., & ... Allcock, H. (2014). Policy and the impact on placement, involvement, and progress in general education: Critical issues that require rectification. *Research and Practice for Persons*

- with Severe Disabilities*, 39(1), 65-74.
- Sago, D. (2012). Precincts and prospects in the use of focus groups in social and behavioral science research. *Qualitative Report*, 17.
- Samuels, C. (2015). Special education law wrought complex changes. *Education Weekly*, 35(12), 9-11.
- Samuels, C. (2017). High court argument to center on level of benefits for special education. *Education Weekly*. Retrieved from <http://www.edweek.org/>
- Samuels, C. (2018). Special education case that made it to Supreme Court enters final chapter. *Education Weekly*. Retrieved from <http://www.edweek.org>
- Sanagi, T. (2016). Teachers' misunderstanding: The concept of inclusive education. *Contemporary Issues in Education Research*, 9(3), 103-114.
- Sanders, P. (2015). Teachers' knowledge of special education policies and practices. *Journal of the American Academy of Special Education Professionals*, 2(1), 207-234.
- Sanzo, K., Clayton, J., & Sherman, W. (2011). Students with special needs, reading education, and principals: Bridging the divide through instructional leadership. *International Journal of Educational Leadership Preparation*, 6(1), 1-20.
- Sapona, R., Etienne, J., Bauer, A., Fordon, A., Johnson, L., Hendricks-Lee, M., & Vincent, N. (2006). Teacher education reform within university special education programs. *Focus on Exceptional Children*, 38(5), 69-81.
- Sargent, A., Gartland, D., Borinsky, M., & Durkan, K. (2009). *Strategies for overcoming challenges when establishing and sustaining special education professional development school partnerships*. *School-University Partnerships*, 3(1), 69-74.
- Schaffer v. Weast. 546 U.S. 49. (2005).

- Schlessinger, S. (2017). Focus on middle school: Inquiry and intellectualism: Professional development for inclusive education. *Childhood Education, 90*(6), 458-461.
- Scott, L., & Temple, P. (2017). A conceptual framework for building UDL in a special education distance education course. *Journal of Educators Online, 14*(1), 24-36.
- Shaffer, L., & Thomas-Brown, K. (2015). Enhancing teacher competency through co-teaching and embedded professional development. *Journal of Education and Training Studies, 3* (3). 117-125. doi: 10.11114/jets.v3i3.685.
- Sharpe, M., & Hawes, M. (2003). Collaboration between general and special education: Making it work. *National Center on Secondary Education and Transition, 2*(1), 20-27.
- Shippen, M., Flores, M., Crites, S., Paterson, D., Ramsey, M., Houchins, D., & Jolivette, K. (2011). Classroom structure and teacher efficacy in serving students with disabilities: Differences in elementary and secondary teachers. *International Journal of Special Education, 26*(3), 36-44.
- Shurr, J., Hirth, M., Jasper, A., McCollow, M., & Heroux, J. (2014). Another tool in the belt: Self-directed professional learning for teachers of students with moderate and severe disabilities. *Physical Disabilities: Education and Related Services, 33*(1), 17-38.
- Simon, M., & Black, W. (2011). Differentiated accountability policy and school improvement plans: A look at professional development and inclusive practices for exceptional students. *International Journal of Special Education, 26*(2), 160-184.
- Sink, C. (2016). Incorporating a multi-tiered system of supports into school counselor preparation. *Professional Counselor, 6*(3), 203-219.
- Skiba, R., Simmons, A., Ritter, S., Gibb, A., Rausch, M., Cuadrado, J., & Chung, C. (2008). Achieving equity in special education: History, status, and current

- challenges. *Exceptional Children*, 74(3), 264-288.
- Smith, K., Dombek, J., Foorman, B., Hook, K., Lee, L., Cote, A., & ... Florida State, U. (2016). Self-study guide for implementing high school academic interventions. *REL 2016-218. Regional Educational Laboratory Southeast*.
- Smithson, J. (2000). Using and analyzing focus groups: Limitations and possibilities. *International Journal of Social Research Methodology*, 3(2), 103-119.
- Spaulding, L., & Pratt, S. (2015). A review and analysis of the history of special education and disability advocacy in the United States. *American Educational History Journal*, 42(1), 91-109.
- Splean, J. & E. Caffarella. (2010, July). Understanding retention and attrition of special education teachers in Nevada through a longitudinal study: A model for other states. *2010 Project Directors' Conference*. Conducted at the meeting of U.S. Office of Special Education Programs, Washington, D.C.
- Strieker, T., Gillis, B., & Zong, G. (2013). Improving pre-service middle school teachers' confidence, competence, and commitment to co-teaching in inclusive classrooms. *Teacher Education Quarterly*, 40(4), 159-180.
- Stromquist, N. (2014). Freire, literacy and emancipatory gender learning. *International Review of Education*, 60, 545-558.
- Summey, E. (2017). *Special education administration: What does it take?* (Doctoral dissertation). Available from [https://libres.uncg.edu/ir/uncg/f/Summey\\_uncg\\_0154D\\_12147.pdf](https://libres.uncg.edu/ir/uncg/f/Summey_uncg_0154D_12147.pdf)
- Sutton, J., Bausmith, S., O'Connor, D., Pae, H., & Payne, J. (2014). Building special education teacher capacity in rural schools: Impact of a grow your own program. *Rural Special*

*Education Quarterly*, 33(4), 14-23.

Sweigart, C., & Collins, L. (2017). Supporting the needs of beginning special education teachers and their students. *Teaching Exceptional Children*, 49(4), 209-212.

Thurston, A. (2013, November). What will it take to keep special ed teachers? *Boston University*. Retrieved from <http://www.bu.edu/today/>

Trainor, A. (2011). Commentary: Using mixed methods to transform special education research. *Learning Disability Quarterly*, 34(3), 219-221.

U.S. Department of Education. (2004). *Innovations in education: Alternative routes to teacher certification*. Retrieved from <https://www2.ed.gov/admins/tchrqual/recruit/altroutes/report.pdf>

U.S. Department of Education. (2000). *Twenty-five years of progress in educating children with disabilities through IDEA*. Retrieved from <http://www2.ed.gov/policy/speced/leg/idea/history.html>

U.S. Department of Education. (2010). *Thirty-five years of progress in educating children with disabilities through IDEA*. Retrieved from <http://www2.ed.gov/policy/speced/>

U.S. Department of Education. (2005). *Education in the United States: A brief overview*. Retrieved from U.S. Department of Education website <http://www.ed.gov/international/edus/>

U.S. Department of Education. (2017). *Questions and answers on U.S. Supreme Court decision *Endrew F. v. Douglas County School District**. Retrieved from <http://www.ed.gov>

U.S. Department of Education, National Center for Education Statistics. (2017). "Children and youth with disabilities." *Digest of Education Statistics, 2014* (NCES 2016-06), Retrieved from <https://nces.ed.gov/programs/>



- U.S. Department of Justice. (2009). *A guide to disability rights law*. Retrieved from <https://www.ada.gov/cguide.htm/>
- Valeo, A. (2008). Inclusive education support systems: Teacher and administrator views. *International Journal of Special Education*, 23(2), 8-16.
- Van Garderen, D., Stormont, M., & Goel, N. (2012). Collaboration between general and special educators and student outcomes: A need for more research. *Psychology in the Schools*, 49(5), 483-497.
- Vitelli, E. (2015). Universal Design for Learning: Are we teaching it to preservice general education teachers? *Journal of Special Education Technology*, 30(3), 166-178.
- Walker, S., Dunbar, S., Meldrum, K., Whiteford, C., Carrington, S., Berthelsen, D., ... Nicholson, J. (2012). The transition to school of children with developmental disabilities: Views of parents and teachers. *Australasian Journal of Early Childhood*, 37(3), 22-29.
- Wall, H., & Palmer, M. (2015). Courage to love: Coaching dialogically toward teacher empowerment. *Reading Teacher*, 68(8), 627-635.
- Wallace, T., Anderson, A., & Bartholomay, T. (2002). Collaboration: An element associated with the success of four inclusive high schools. *Journal of Educational & Psychological Consultation*, 13(4), 349-381. doi:10.1207/S1532768XJEPC1304\_05
- Walsh, M. (2017). Supreme Court backs family in case on denial of service dog in school. *Education Week School Law*. Retrieved from <http://www.edweek.org/>
- Wasburn-Moses, L. (2005). Roles and responsibilities of secondary special education teachers in an age of reform. *Remedial and Special Education*, 26(3), 151-158.
- Weatherly, J. (2018, March). *Legal issues in special education*. Paper presented at the CASE 2018 Winter Hybrid Conference.

- Wilson, K., Dykstra, J., Watson, L., Boyd, B., & Crais, E. (2012). Coaching in early education classrooms serving children with autism: A pilot study. *Early Childhood Education Journal, 40*(2), 97-105.
- Wright, P. (2015). Damages against teacher who refused to implement an IEP: Doe v. Withers. *Wright's Law*. Retrieved from <http://www.wrightslaw.com/advoc.ltrs/>
- Wright, P. (2016). The history of special education law. *Wright's Law*. Retrieved from <http://www.wrightslaw.com/law/art/history.spec.ed.law.htm>
- Wyatt, M. (2015). Using qualitative research methods to assess the degree of fit between teachers' reported self-efficacy beliefs and their practical knowledge during teacher education. *Australian Journal of Teacher Education, 40*(1), 120-127.
- Yao, Y. (2015). Teacher perceptions of classroom assessment: A focus group interview. *SRATE Journal, 24*(2), 51-58.
- Yildiz, N. (2015). Teacher and student behaviors in inclusive classrooms. *Educational Sciences: Theory and Practice, 15*(1), 177-184
- Zagona, A., Kurth, J., & MacFarland, S. (2017). Teachers' views of their preparation for inclusive education and collaboration. *Teacher Education and Special Education, 40*(3), 163-178.
- Zalaquett, C., & D'Andrea, M. (2007). Expanding Hipolito-Delgado and Lee's empowerment theory: A response. *Professional School Counseling, 10*(4), 333-335.
- Zilz, W. (2006). Manifestation determination: Rulings of the courts. *Education and the Law, 18*(2-3), 193-206.
- Zirkel, P. (2014). The law in the special education literature: A brief legal critique. *Behavioral Disorders, 39*(2), 102-107.

Zirkel, P., & Hetrick, A. (2017). Which procedural parts of the IEP process are the most judicially vulnerable? *Exceptional Children*, 83(2), 219-235.

Zirkel, P. (2018). Special education legal alert. *Council of Administrators of Special Education*.

Retrieved from [www.casecec.org](http://www.casecec.org)

## Appendix A

### Sample Contact Letter to Superintendent/District Personnel

*Sample Letters to Superintendents of Schools where doing Research*

---

██████████  
Superintendent of Schools  
██████████ School District  
██████████

Dear ██████████:

I am writing to respectfully request your permission to conduct research in your schools, using both general education teachers and special education teachers, in order to complete the studies needed for my doctorate degree. I am in the process of completing my doctoral studies and dissertation through Northwest Nazarene University in Nampa, Idaho in the Education program.

The title of my dissertation is *Success for All through Supporting Special Education*. With the focus in the Individuals with Disability Education Act (IDEA) on the use of effective Individual Education Plans (IEPs) and inclusive education, all educators are now expected to understand and implement different aspects of special education components into their classrooms. This assist the education received by students with varied disabilities. My research is focused on determining how much knowledge of and confidence in using teachers on the secondary level have of the IEP process, special education mandates, and inclusive teaching strategies. I am hoping to conduct my research in several different districts in Idaho to determine methods to assist teachers in enhancing inclusive teaching practices.

My research study instrument is a survey asking about knowledge of special education mandates and IEPs, as well as open-ended questions asking about teachers' participation and confidence in inclusive teaching practices. Then, I would like permission to have an expert in the field of special education mandates and teaching practices present an hour long training to the secondary staff. After the training, the survey instrument would again be presented to the secondary teaching staff. This will allow for me to gather data on any growth in confidence and knowledge due to the specific training. Additionally, I would conduct focus groups with willing training participants to further discuss the impact of the training on inclusive education teaching practices. With your permission, I will contact the principals of the secondary schools and ask for their assistance in distributing the survey electronically. The surveys should take approximately 15-20 minutes and teachers will be asked to consent prior to completing the first survey. The results will be secured in an electronically protected file and reviewed by a committee. Additionally, I will ask teachers who are willing to join me in a focus group discussion lasting less than 60 minutes. This will be conducted either in person or electronically in order to gather further details and insights into the effectiveness of the training.

This research study will be reviewed by NNU's Human Resource Review Committee and is under the supervision of Dr. Heidi Curtis, Department Head, Northwest Nazarene University. Dr. Heidi Curtis can be reached at [hcurtis@nnu.edu](mailto:hcurtis@nnu.edu).

I look forward to hearing from you in regard to your permission. Thank you for your time and attention to this matter. I will be happy to share the results of my research upon completion if you so desire.

Sincerely,  
Pandi Elison-Chang  
Doctoral Student, NNU

I give my permission for the above stated research to be done within the [REDACTED] School District during the 2017-2018 school year.

Signature \_\_\_\_\_  
Superintendent

Date\_\_\_\_\_

## Appendix B

### Permission Letters to Conduct Research in School Districts (Examples)

[REDACTED]

#### Educating

[REDACTED]

3/20/17

RE: Permission for training

To Whom It May Concern:

The [REDACTED] School District is excited to give permission for Pandi Elison-Olsen to conduct a training on IDEA and accommodations to our teachers here in [REDACTED]. The dates have not been finalized, but the training will take place the week of the August 14<sup>th</sup>, 2017. The training will be focused on middle school staff, but we will also be inviting teachers from other grade levels. We here in [REDACTED] are excited for this opportunity and look forward to the training.

If you have any questions, please feel free to contact me.

Sincerely,

[REDACTED]

March 17, 2017

Northwest Nazarene University  
Attention: HRRC Committee  
Helstrom Business Center  
1st Floor 623 S. University Boulevard  
Nampa, ID 83686

RE: Research Proposal Site Access for Ms. Pandi Elison-Chang

Dear HRRC Members:

This letter is to inform the HRRC that Administration at [REDACTED] School District has reviewed the proposed dissertation research plan including the teachers in school sites that will serve as subjects, survey data collection plans, training presentation outline, and purpose of the study. Ms. Elison-Chang has permission to conduct her research in the district of and with the teachers of the [REDACTED] District. The authorization dates for this research are August 2017 to December 2017.

Respectfully,

[REDACTED]

School District, Superintendent

## Appendix C

### Knowledge of IDEA Survey

**Part 1: Teacher perceptions about special education. Please check the box indicating your response.**

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1. I enjoy having students with disabilities in my classroom					
2. I believe that I have the skills to effectively teach most students with disabilities in the inclusion setting					
3. I believe that I have sufficient knowledge of special education policies and procedures as mandated by the Individuals with Disabilities Education Act (IDEA).					
4. I believe that I received adequate training on IDEA through coursework and professional development activities					

**Part 2: Please read the statements below. Based on your knowledge of IDEA and its' regulations, check the response indicating whether or not you believe the statement is accurate.**

	Yes, it is accurate.	It is probably accurate.	Uncertain.	It is probably not accurate.	No, it is not accurate.
1. Public school personnel can remove a child with a disability who brings a weapon to school. They may either suspend the student for 10 or less school days or send the student to an alternative educational setting.					
2. If a parent does not respond to a school with consent for					



reevaluation, the school may reevaluate the child as long as they take reasonable steps to obtain permission.					
3. An Individual Education Program (IEP) should include a record of student's past school performance.					
4. Federal law requires the least restrictive environment in placement decisions for students with disabilities.					
5. If a school and a parent disagree on whether a child should be evaluated for special education services, the parent may request a due process hearing but a school may not request a due process hearing.					
6. Schools are required to notify parents in writing after initiating special education services for their child.					
7. If a parent requests that a certain curriculum be used with his or her child and can produce data demonstrating its' effectiveness, the school must implement the curriculum.					
8. If a teacher believes one of his/her students has a disability, s/he reports this to the evaluation team at the school. The team begins testing the student for a disability.					
9. An IEP should include a transition plan for students. Teachers must implement the plan as students' transition from one grade to the next.					
10. School districts must have available placement options ranging from the general					

classroom, special classes, special schools, home instruction, and instruction in hospitals and other institutions for all students with disabilities.					
11. If a school is not providing a student with the amount of speech therapy as required in the child's IEP, parents may request due process.					
12. An IEP must include suggestions from parental involvement which teachers are required to implement.					
13. If a student is not making progress on his/her IEP goals, teachers should monitor the student's performance, report the student's progress to his/her parents periodically, and address the lack of progress toward the goal at the student's next annual IEP meeting.					
14. A general education teacher should be part of the evaluation process for a child being evaluated for a potential disability.					
15. Only teachers with special education certification are required to implement the accommodations listed in a student's IEP.					
16. The preferred placement option for a student with a disability is full inclusion with supplemental aids.					
17. A teacher can change a student's educational placement from the special education setting to the general education setting					

after getting administrative and parental permission.					
18. If a parent requests all records related to their child's education, a school must provide them within 45 days.					
19. A student's IEP goals should be designed to meet his/her needs and enable him/her to be involved in and make progress in the general education curriculum.					
20. When identifying a child with a learning disability, school districts are required to use a formula that measures the discrepancy between a student's score on an IQ test and an achievement test.					
21. A member of an IEP team is excused from attending the IEP meeting if the parent and school agree to the excusal, and the team member submits written input prior to the meeting.					
22. Due to scheduling difficulties, it is appropriate for service providers to schedule special education services during recess and other recreational activities.					
23. Schools are required to provide parents with a copy of procedural safeguards. The safeguards include parental rights, procedural rights for students with disabilities, dispute resolution mechanisms, and the voluntary mediation process.					
24. Parents are required members of the IEP team.					

The team must consider parental concerns for enhancing the education of their child at the IEP meeting.					
---	--	--	--	--	--

**Part 3:** Please briefly answer the following questions.

1. How often do you attend IEP meetings? What type of input do you provide at IEP meetings?
2. Please provide an example(s) of how you have adapted curriculum to meet the standards of inclusiveness.
3. Please provide an example(s) of how you have implemented accommodations from the IEP for a student in your classroom.
4. How have you collaborated with professional colleagues about inclusive education?

**Part 4:** Please complete the following demographic information.

1. Please indicate your main teaching assignment(s).
  - Special Education
  - English/Language Arts
  - Reading
  - Social Studies
  - Mathematics
  - Fine Arts
  - Science
  - Physical Education/Health
  - Foreign Language
  - Other
  
2. Please indicate your area(s) of teacher certification.
  - Elementary
  - Special Education
  - English/Language Arts
  - Reading
  - Social Studies
  - Mathematics
  - Fine Arts
  - Science
  - Physical Education/Health
  - Foreign Language
  - Other
  
3. Please indicate the primary grade level you teach.
  - 7     8             9     10     11     12
  
4. How many years have you been teaching?

5. What is the highest level of formal education you have completed?

Bachelor's                       Some graduate work  
 Master's                          Specialist degree  
 Doctoral

6. How many college courses pertaining to special education have you completed in the past 5 years?

0                       1                       2                       3  
 4                       5                       6                       7 or more

7. How many professional development activities regarding special education have you completed in the past 5 years?

0                       1                       2                       3  
 4                       5                       6                       7 or more

8. What is your gender?

Male                       Female

## Appendix D

### Letter to Questionnaire Creator

Pamela Sanders  
[REDACTED]

Dr. Sanders:

I am currently working on my doctoral studies at Northwest Nazarene University in education. As part of my literature review, I found the study that you did in Missouri pertaining to the knowledge teachers have of special education policies and regulations. The measure that you designed and implemented to assess teachers' knowledge of special education law is ideal to test the participants in my own study.

I am writing to you to request permission to use your survey instrument with participants in my own study. This will be for educational purposes only. Please consider my request. If permission is granted, I will cite your work and give credit to you for all the work you did in creating and piloting an instrument that is most useful in finding out more information that can assist in special education.

I look forward to hearing from you and receiving confirmation of your permission to use your survey instrument. Thank you in advance.

Pandi Elison-Chang  
Doctoral student at Northwest Nazarene University

---

Reply received by e-mail on December 11, 2016. As follows:

**Pamela Sanders**

5:44 PM (1  
hour ago)

to me

Feel free to use the survey instrument. Thank you for asking!

Pamela Sanders

**From:** Pandi Elison-Chang [mailto:[pelison-chang@nnu.edu](mailto:pelison-chang@nnu.edu)]

**Sent:** Saturday, December 10, 2016 2:44 PM

**To:** [pamelasanders@gmail.com](mailto:pamelasanders@gmail.com)

**Subject:** request to use survey instrument

Ms. Sanders -

Last December you gave me permission to use your survey instrument for my doctoral research study. I appreciate this very much. I have reviewed your study many times. In order to ensure I am using your tool correctly, though, would you be willing to send me the specific scoring that you used on the IDEA Knowledge survey? I will be using it at four school sites this fall.

Thank you, Pandi Elison-Chang



**Pamela Sanders** <pamelasanders@gmail.com>

9/10  
/17

to me

No problem. Here is the scoring criteria.

Part 1 Questions 1 and 2 were used to measure attitudes toward inclusion. In order to run statistics, the likert scale was assigned numbers 1 through 5 (strongly agree= 5, agree=4, uncertain=3, disagree=2, strongly disagree=1) and the two questions were combined to give a score for attitudes toward inclusion.

Part 1 Question 3 and 4 were used to measure perception of knowledge. In order to run statistics, the likert scale was assigned numbers 1 through 5 (strongly agree= 5, agree=4, uncertain=3, disagree=2, strongly disagree=1) and the two questions were combined to give a score for perception of knowledge.

For part 2, I measure each category of IDEA with 4 questions. In order to run statistics, the likert scale was assigned numbers 1 through 5 (yes it is accurate=5, it is probably accurate=4, uncertain=3, it is probably accurate=2, no it is not accurate=1). The total of the 4 questions gave the knowledge component for that category of IDEA. Also, each category had 2 reverse coded questions.

Part 2 questions 1, 7, 13, and 19 were used to measure zero reject. Numbers 7 and 13 were reverse coded.

Part 2 questions 2, 8, 14, and 20 were used to measure nondiscriminatory evaluation. Numbers 8 and 20 were reverse coded.

Part 2 questions 3, 9, 15, and 21 were used to measure program development. Numbers 9 and 15 were reverse coded.

Part 2 questions 4, 10, 16, and 22 were used to measure LRE. Numbers 4 and 22 were reverse coded.

Part 2 questions 5, 11, 17, and 23 were used to measure procedural due process. Numbers 5 and 17 were reverse coded.

Part 2 questions 6, 12, 18, and 24 were used to measure parental participation. Numbers 6 and 12 were reverse coded.

Everything else for scoring should be included in the methods section of my dissertation. Let me know if you have any questions.

## Appendix E

### Permission and Participant Option on Participation for Survey on Qualtrics

#### Teacher Knowledge of IDEA/Attitudes pertaining to Special Education Informed Consent

You are being asked to participate in this training and research study because you are a currently practicing educator working with inclusive education. This online survey should take about 10 minutes to complete. Participation is voluntary, and responses will be kept confidential. Any identifying information will be withheld pertaining to the participants or school districts. For this research project, the researcher is requesting demographic information, though there will be no individual identifying information. Your email address will be utilized as a way to match your survey results to show possible growth as a result of the training, but these will be kept confidential by the researcher. Your involvement in helping to learn to better serve teacher needs pertaining to special education and its' legal requirements is appreciated.

There will be no direct benefit to you from participating in this study, but your participation will help to increase the understanding of teacher knowledge pertaining to inclusive education.

The information you provide may help educators and universities in developing programs to better serve teachers and students in special education, especially with legal requirements. The risks to the participants may include discomfort at answering some of the questions on the survey, but you are free to decline to answer any questions you do not wish to answer or to stop participation at any time.

If you have questions/concerns about the study, please contact the principal researcher, Pandi Elison-Chang, M.A., Ed.S., via email at pelison-chang@nnu.edu. If for some reason you do not wish to do this, you may contact Dr. Cyndi Cook, Doctoral Committee Chair at Northwest Nazarene University, via email at ccook@nsd131.org.

Your response to the following indicates either your informed consent to participate or your choice not to participate:

I affirm I am at least 18 years of age, and I agree to participate in this survey.

I do not wish to participate in this survey.

#### Teacher Knowledge of IDEA/Attitudes pertaining to Special Education - Informed Consent

Thank you for participating in the training on Special Education Law and Accommodations. Your involvement is helping to better serve teacher needs pertaining to special education and its' legal requirements.



There will be no direct benefit to you from participating in this study, but your participation will help to increase the understanding of teacher knowledge pertaining to inclusive education.

If you have questions/concerns about the study, please contact the principal researcher, Pandi Elison-Chang, M.A., Ed.S., via email at pelison-chang@nnu.edu. If for some reason you do not wish to do this, you may contact Dr. Cyndi Cook, Doctoral Committee Chair at Northwest Nazarene University, via email at ccook@nsd131.org.

Your response to the following indicates either your informed consent to participate or your choice not to participate:

I affirm I am at least 18 years of age, and I agree to participate in this survey.

I do not wish to participate in this survey.

## Appendix F

### HRRC Approval from Northwest Nazarene University

----- Forwarded message -----

From: **Northwest Nazarene University** <[dmatlock@nnu.edu](mailto:dmatlock@nnu.edu)>

Date: Fri, May 5, 2017 at 3:24 PM

Subject: RE: Protocol #4042017 - Success for All in Education through Supporting Inclusive Education

To: Heidi Curtis <[hcurtis@nnu.edu](mailto:hcurtis@nnu.edu)>

Dear Pandi,

The HRRC has reviewed your protocol: Protocol #4042017 - Success for All in Education through Supporting Inclusive Education. You received "Full Approval". Congratulations, you may begin your research. If you have any questions, let me know.

Dean Matlock

## Appendix G Outline of Professional Training

- **IDEA**

- **Why is it important to you as a teacher?**



**There are six major principles of the IDEA, focusing on students' rights and the responsibilities of public schools to children with disabilities.**



**Free Appropriate Public Education. ...**



**Appropriate Evaluation. ...**



**Individualized Education Plan. ...**



**Least Restrictive Environment. ...**



**Parent Participation. ...**



**Procedural Safeguards. ...**

- **So why is this important to you?**



**96% of students with disabilities are taught in general education settings for at least 40% of their day**

- **97% of general education teachers have taught students with disabilities in their classrooms**
- **Each student who receives special education must have an Individualized Education Program (IEP).** As the teacher of a special education student, you'll likely participate as a member of the team that develops the IEP.
- **The student(s) you teach will be expected to participate with your other students and progress toward state standards,** but your general curriculum will not change in significant ways.
- **You'll work with the special education teacher to develop accommodations and modifications** that will help your special education students to learn material from the general education curriculum.
- **It's the Law!**
  - **General Education Teachers are required to attend IEP and Eligibility Meetings.** there can not be a meeting with you!
- **Court Case: Doe v. Withers**
- **1992**
- **Refused to give student accommodations**
- **The jury awarded \$15,000 in damages to the student**
- **teacher had to pay these damages out of his own pocket**

**You need to know that you are an important player in the IEP Meeting!**

- **What Is your role in the IEP Meeting?**

- **IDEA states that the regular education teacher is to be invited to the IEP meeting if a student is or may be participating in regular education environment, because the regular education teacher is most knowledgeable about the general curriculum.**

**You are the expert about...**

- **gen. Ed. Curriculum**
- **Grade Level Learning expectations**
- **Skills needed by students to meet expectations**
- **State mandated assessments**
- **Social expectations at school**
- **Behavioral expectations in the classroom**

- **Your Active participation is needed when discussing...**

- **accommodations**

- **modifications**

- **Accommodations help a student learn the same material and meet the same expectations as their classmates**

- **Modifications changes what a student is taught or expected to learn.**
- **If a student has reading issues, for example, she might listen to an audio recording of a text.**
- **a student could be assigned shorter or easier reading assignments.**

- **Common accommodations**

**Presentation accommodations:**

- Listen to audio recordings instead of reading text
- Work with fewer items per page or line and/or materials in a larger print size
- Have a designated reader
- Hear instructions orally
- Have another student share class notes with him/her
- Be given copies of notes

**Response accommodations:**

- Give responses in a form (oral or written) that's easier for him
- Dictate answers to a scribe
- Use a word processor to type notes or give responses in class
- Use a calculator or table of "math facts"

**setting accommodations:**

- Work or take a test in a different setting, such as a quiet room with few distractions
- Sit where he learns best (for example, near the teacher)

- Use Fidgets

**Timing accommodations:**

- Take more time to complete a task or a test
- Take frequent breaks, such as after completing a task

**SCHEDULING ACCOMMODATIONS:**

- TAKE MORE TIME TO COMPLETE A PROJECT
- TAKE A TEST IN SEVERAL TIMED SESSIONS OR OVER SEVERAL DAYS

**ORGANIZATION SKILLS ACCOMMODATIONS:**

- USE AN ALARM TO HELP WITH TIME MANAGEMENT
- MARK TEXTS WITH A HIGHLIGHTER

**Assignment modifications:**

- Complete fewer or different homework problems than peers
- Write shorter papers
- Answer fewer or different test questions
- Create alternate projects or assignments

**Curriculum modifications:**

- Learn different material (such as continuing to work on multiplication while classmates move on to fractions)
- Get graded or assessed using a different standard than the one for classmates

- Be excused from particular projects

- **Let's Review:**

1. IDEA is special education law
2. general education teachers are important to special education
3. general education teachers are mandatory participants at IEP Meetings
4. all children can learn... just in different ways on different days!



## Appendix H

### Focus Group Protocols and Permission

#### Focus Group Discussion Outline and Questions

##### **Welcome:**

Thank you for agreeing to be a participant in this focus group. I appreciate your willingness to participate.

##### **Introductions:**

Moderator and participants

##### **Purpose of Focus Group:**

I appreciate your willingness to participate in this focus group intended to further the understanding of teacher knowledge of inclusive education, both legal requirements and teaching strategies.

##### **Ground Rules:**

- You, the participants, will do the talking. Hopefully, all will participate and feel welcome. Your input is extremely valuable.
- There are no right or wrong answers. Every person's experiences and opinions are important. I want to hear a wide range of opinions.
- What is said in this focus group needs to remain confidential.
- Audio recording will be made of the focus group discussion. I want to be able to capture everything that is said. No identifying information will be used in research reporting. Rather, information will be transcribed and coded for themes that will be used to further the research and understanding.

##### **Questions:**

1. As an educator, what is your view/opinion on inclusive education, referring to students legally designated with special education services being taught in general education classes?
2. Who has influenced your view on inclusive education?
3. How do you feel about the training you have had on inclusive education strategies? Specifically, how do you feel about the training that you received this fall?
4. Have you been able to implement any new strategies pertaining to students with learning disabilities since the training? How do you feel about those strategies?
5. Did the training generate any new discussion in your school/district pertaining to special education?
6. How do you feel about the laws regulating inclusive education?
7. Did the training from this fall assist you in meeting the legal requirements, such as participation in IEP meetings or complying with accommodations?
8. If you could give advice to new teachers entering education, what advice would you give them pertaining to inclusive education?

9. Is there anything else you like to say about inclusive education, the laws regulating special education, and/or the strategies and practices that are included as part of inclusive education?

### **Consent to Participate in Focus Group**

You have been asked to participate in a focus group related to the training on inclusive education, the law governing special education, and strategies to teaching students with disabilities. The purpose of the group is to increase understanding of the effectiveness of the training and the need that may exist for increasing success in inclusive education. The information learned in the focus group will be used to complete research, increase understanding by educators on inclusive education, and improve future trainings.

You can choose whether or not to participate in the focus group and may stop at any time. Although the focus group will be audio recorded, your responses will remain anonymous and no names will be mentioned in the report. The audio recording will be transcribed with no personal identifies included, coded by theme, and that transcription will be referenced in the research report.

There are no right or wrong answers to the focus group questions. The researcher wants to hear many different viewpoints and from all participants. I hope you can be honest in your responses even when your responses may not be in agreement with the rest of the group. In respect to the time constraints and participation of all, we ask that only one individual speak at a time in the group and that responses made by any and all participants be kept confidential within the focus group.

I understand the above information and agree to participate fully under the conditions stated above.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

### **Quick Demographic Information –**

What is the level of your degree?	Bachelor	Some past BA/BS	Master's
	Doctoral	Specialist	Other

What grade level do you teach?	Elementary	6-9	9-12
--------------------------------	------------	-----	------

How many years have you taught?

## **Appendix I**

### **Guiding Questions for Focus Group Discussions**

#### **Questions:**

1. As an educator, what is your view/opinion on inclusive education, referring to students legally designated with special education services being taught in general education classes?
2. Who has influenced your view on inclusive education?
3. How do you feel about the training you have had on inclusive education strategies? Specifically, how do you feel about the training that you received this fall?
4. Have you been able to implement any new strategies pertaining to students with learning disabilities since the training? How do you feel about those strategies?
5. Did the training generate any new discussion in your school/district pertaining to special education?
6. How do you feel about the laws regulating inclusive education?
7. Did the training from this fall assist you in meeting the legal requirements, such as participation in IEP meetings or complying with accommodations?
8. If you could give advice to new teachers entering education, what advice would you give them pertaining to inclusive education?
9. Is there anything else you like to say about inclusive education, the laws regulating special education, and/or the strategies and practices that are included as part of inclusive education?

## Appendix J

### Themes and Coding from Focus Group Discussions

Themes/Coding

Theme – Codes	No. of Responses	Theme – Codes	No. of Responses
<b>Training Needs</b>	<b>92</b>	<b>Classroom Experience</b>	<b>61</b>
Strategies	34	Positive for/with student	19
Computer Simulations	16	Negative for/with student	9
More often	19	Function of Inclusion	33
Not even recognize needs	11		
<b>Preservice Training</b>	<b>23</b>	<b>Desire for More Collaboration</b>	<b>32</b>
Little/No Training/Classes	17		<b>106</b>
Many Trainings/Classes	6	<b>Classroom Accommodation</b>	55
<b>Post-service Training</b>	<b>64</b>	Teacher Positive	35
Enjoyed, Positive Impact	52	Training Impact	51
		Teacher Negative	
<b>Individual Education Plan(IEP)</b>	<b>91</b>	<b>Inclusive Education</b>	<b>80</b>
Lack Knowledge/Need	30	Support	44
Training	31	Hesitant/Intimidated	19
Prof. Training Assist in IEP	30	Formation of Opinion	17
Logistics of IEP Problematic			
<b>Legal Training Special Education</b>	<b>57</b>	<b>Challenges/Inclusive</b>	<b>65</b>
Desire/Appreciate Knowledge	23	School Structure	31
Nervousness/Fear	16	Number Students	27
Aware of Legal Aspect	18	Time	7

## Appendix K

### National Institutes of Health (NIH) Certification

